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IN SUPPORT OF CHILDREN: MANY SUCCESSES BUT MUCH TO BE DONE

HEARING

BEFORE THE

SELECT COMMITTEE ON HUNGER
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

SECOND SESSION

HEARING HELD IN WASHINGTON, DC, MARCH 23, 1988

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IN SUPPORT OF CHILDREN: MANY SUCCESSES BUT MUCH TO BE DONE

Wednesday, MARCH 23, 1988

House of Representatives,
Select Committee on Hunger,
Washington, DC.

The committee met, pursuant to notice, at 10:40 a.m., in room 2203, Rayburn House Office Building, Hon. Mickey Leland [chairman of the committee] presiding.

Members present: Representatives Dorgan, Espy, Mfume, Patterson, Gilman, and Smith.

OPENING STATEMENT OF HON. MICKEY LELAND, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Chairman Leland. Good morning everyone. I look forward to today's hearing on the vital subject of child survival. I welcome the opportunity to engage in discussion with our witnesses on the progress underway, and also on needs not yet met in this critical area. We appreciate today's participation of the witnesses and, more importantly, appreciate their efforts in making the Child Survival Revolution a successful one.

Let me commend our colleague, Congressman Tony Hall, for his ongoing leadership on the child survival issues here in the Congress. Tony has led the Select Committee's and the House of Representatives' efforts on this front for the last 3½ years. As a result of his efforts, and those of many others who will be represented here today, the importance of child survival has been vastly and permanently enhanced as a central element of the U.S. foreign assistance program. This enhancement means that today literally millions of children are, for the first time, being reached with the means of resisting disease and fighting chronic malnutrition. Millions of children are surviving who might not otherwise. For that, we are all excited and we are grateful. I regret that Tony is ill today and cannot be here to Chair this hearing.

The Child Survival Revolution is important to the Select Committee because it symbolizes the best and most important of American values. In a society of such wealth and opportunity as ours, in a country which expends such incredible sums of money on armies and weapons and on the pursuit of entertainment and pleasure, we can surely afford the few dollars it requires to immunize a child against polio. We can surely afford the few cents it costs to provide oral rehydration and save a child from death from dehydration. We can afford to support the Child Survival Revolution and we are.

American generosity, values, and concern for those not able to help themselves underscores our commitment to expanded child survival programs.

All should know that this committee's commitment to child survival programs continues. There is much to be done to ensure that as many children are being reached as is possible. There is much to be done to ensure that the programs are as diverse and broad as the proper definition of child survival implies. As long as 40,000 children are lost every day in the world to disease and malnutrition, the members of this committee and I will continue to insist that child survival activities be given the priority they deserve.

Unfortunately, there is some discouraging news on the child survival front. The executive branch is proposing to begin reducing our commitments to these critical programs.

Three areas, in particular, are facing deep cuts: Our contribution to UNICEF, and A.I.D.'s bilateral programs in sub-Saharan Africa and Central America.

The cut for UNICEF is deepest, from nearly $55 million this year to a request of only $32 million for fiscal year 1989. The cut in Africa is also severe, from nearly $37 million in 1987 to a projected $25 million in fiscal year 1988. This cut occurs at a time when the needs of Africa's children and mothers, by the way, have never been greater, and when the Congress has voted large increases in U.S. assistance to that continent. The cut in another troubled region, Central America, would reduce bilateral programs in child survival from $25 million in 1987 to less than $20 million in 1988.

I hope that there is still time to change the 1988 allocations, particularly for Africa, and I look forward to any encouraging words our administration witness may have on this.

I look forward to the testimony and the discussion with our witnesses. I again express appreciation for the efforts that so many represented here are making to guarantee that the Child Survival Revolution is a revolution which succeeds.

We'll now call on our first witnesses. We patiently await the arrival of some of our other members. They are engaged, as you know, in very busy schedules. We have all kinds of conflicts today with the different committees that are meeting.

The committee will hear the witnesses in two panels. The first consists of Bradshaw Langmaid, Carl Taylor and Michael Merson. Mr. Langmaid is Deputy Assistant Administrator of the Bureau for Science and Technology at the Agency for International Development, or A.I.D. Dr. Taylor is a professor emeritus at Johns Hopkin University and is representing UNICEF at this hearing. Dr. Merson is the director of the Diarrheal Diseases Control Program at the World Health Organization in Geneva.

Mr. Langmaid, if you will give your testimony first, and then we will hear from Dr. Taylor, and finally from Dr. Meson. Our questions will then follow.

Your prepared statements will be appear in the record.

You may proceed.

STATEMENT OF BRADSHAW LANGMAID, JR., DEPUTY ASSISTANT ADMINISTRATOR, BUREAU FOR SCIENCE AND TECHNOLOGY, U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (U.S. A.I.D.)

Mr. **Langmaid**. Thank you, Mr. Chairman.

I've submitted a rather long statement for the record and I will just summarize the high points of it here.

Chairman **Leland**. The committee will certainly appreciate the summary, and we'll keep the record open for the purpose of entering the full text of your statement.

Mr. **Langmaid**. Thank you.

It is a pleasure to be here again to testify in support the Agency for International Development's Child Survival Program. I have submitted a relatively long statement, as I said.

The first point I would like to make in summary of that statement, is that this is a program that works. Children's lives are being saved. It's a program that uses a series of interventions which are cost- effective and relatively easy to implement. There are, of course, ups and downs in the program, some work better than others. We must operate within a tight budget and satisfy a wide range of priorities. But we are making progress and we intend to meet the agency's goals.

The second point I would make is that our new Administrator, Ambassador Alan Woods, shares the same commitment to child survival that his predecessor, Peter McPherson, had. I was pleased to note that one of the first general messages he sent to our Washington staff and to our field missions, was a letter reaffirming the Agency's commitment to child survival.

The third point I think that needs to be made is that the extensive and close donor collaboration involving international organizations, some of whose representatives are sitting on my right and my left, other bilateral donors and a whole range of private voluntary organizations is in place and working well.

The third meeting of what has been referred to as the Bellagio Group, recently completed a review of child survival at Talloires in France. Ambassador Woods represented A.I.D. at this meeting of heads of agencies. It was clear that the commitment of all concerned remains high.

At the same time, to be realistic, the coverage goals we seek in child survival will not be realized in all emphasis countries by 1990. In some countries there is little access to all of the population. In others there is not sufficient security to mount and sustain programs. And in others the infrastructure simply is not in place. We are learning from our experience. It may be relatively easy to obtain quick increases in immunization or ORT access with a short-term program, but it is far more difficult to sustain that effort and build on it over time. Sustainability does not mean only resource mobilization. It also means training, institutional development, and commitment.

In addition it is important to note that while we have technologies that work, they may not be adequate to meet the job of reaching all the currently unserviced populations. Further research may be needed to give us heat stable vaccines, better ORS solutions, and a single dose multiple antigen vaccination. We are now working in A.I.D. in all these areas.

Mr. Chairman, this committee has been in the lead in support of child survival. We have tried to use the funds provided by Congress with focus and effectiveness. We are proud of the progress that has been made, but also very mindful of the fact that the job is not yet done. We intend to keep our resources and our effort focused on achieving our child survival goals.

Thank you.

[The prepared statement of Mr. Langmaid appears at the conclusion of the hearing, see p. 52.]

Chairman **Leland**. Thank you.

Dr. Taylor.

STATEMENT OF CARL TAYLOR, M.D., JOHNS HOPKINS UNIVERSITY, ON BEHALF OF JAMES P. GRANT, EXECUTIVE DIRECTOR, UNICEF

Dr. **Taylor**. Thank you, Mr. Chairman.

James Grant has asked me to extend to you his greetings and his regret that he cannot be here himself. He is in India and in Bhutan this week.

I have particular pleasure in speaking for him here as his Senior Advisor for Health, because this committee has shown early and outstanding leadership in promoting a new global ethic giving priority to children. You stimulated the U.S. Congress to be the first of many national parliaments to make a formal commitment to the Child Survival and Development Revolution. You have financed generally the Child Survival Fund, administered by U.S. A.I.D., and working through many national agencies and private voluntary organizations. It has been a privilege for UNICEF to work with these other international agencies. Children, mothers, and the health workers around the world, express to you their gratitude for the support that has been given to this important effort.

You have contributed to the fact that today we have over 2 million children a year being saved by the new child survival programs. Results have validated the ambitious claims made 5 years ago when the Child Survival and Development Revolution started. Whitman has a line that I think applies here, expressing the fact that it is inherent in success that it demands only greater effort. And I think that we are at that stage in the effort that we're talking about this morning. Our task has just begun. We can and should be saving the lives of at least 6 million children every year by 1990. What is more, the data show that falling death rates of children are associated with falling birth rates and reduced population growth.

You have before you a letter from James Grant, which I would request be introduced into the record. It has several documents attached to it. The first of these annexes is a summary of Jim's annual report on the State of the World's Children. That gives detailed accounts of the achievements in promoting child survival. I would only like to add some personal examples from my own recent field visits for UNICEF which will relate primarily to EPI, since we have Mike Merson here, who will concentrate on ORT.

Worldwide the coverage for the EPI Program, the immunization of children, has gone up from about 5 percent of children in developing countries at the time the program was started, to over 50 percent of the children in developing countries as a result of the special efforts that have been made.

Last month I was in Turkey. Three years ago 22,000 children were dying of vaccine preventable diseases each year. In November of 1984 out of 5 million children under 5 in Turkey, 4 million were immunized as a result of a massive national, social mobilization. Diseases such as measles have now essentially disappeared, to the point where pediatrics professors told me that they have to teach students from pictures now, rather than showing them clinical cases.

We were at first concerned about the sustainability question in Turkey, but the services are now becoming part of primary health care and coverage is being maintained as indicated in a review of the program last month by WHO amd UNICEF together. Other interventions are being added, such as ORT. And I was there in order to introduce a major pneumonia control program on a national basis, because that is the number one cause of death in Turkey, as in a number of other countries.

Second, more than one-fifth of the world's children live in China. I was UNICEF representative in China for 2½ years, returning recently. In 1984, when I was negotiating the national immunization program the services were limited to what were called the "rush and relay method." I have to be careful how I enunciate that, because once when I said it people thought I said Russian Roulette method. [Laughter.]

The reason for the difficulty with this method was that they distributed vaccines within 3 days from the vaccine institutes to the county headquarters, but then the barefoot doctors had to be there on their bicycles and take their vaccine and pedal very rapidly out to their village where they had the children lined up, and as a result of that kind of lack of refrigeration, much of the vaccine was inactivated.

With UNICEF cold chain equipment now, that has all changed, because the vaccines are now protected, and the Chinese are clearly going to achieve their goal of 85 percent coverage in every provence by 1988. And this includes Tibet, where UNICEF now has nine major projects. You've heard about the goal in Latin America of eradicating polio by 1990. I think China will also achieve that goal.

I was in Nepal all of February doing health surveys in villages in a remote, high altitude valley east of Everest. In two villages I found government immunization teams who had hiked several days in order to reach these remote villages, and their vaccines were still good with the cold chain equipment, and their technique was good. But their coverage was still inadequate because of the difficulties of reaching those remote areas.

The second attachment in the letter of Jim Grant, is a preliminary report from the recent Child Survival Task Force Conference at Talloires, France. All of the heads of international agencies and experts celebrated the current achievements in child survival and charted the future challenges. Progress is being made in the very difficult problem of maintaining sustainability. It does take greater effort to promote the transition to locally supported primary health care. This long-term focus requires continuity now, and expansion of our efforts.

Some of the new goals identified at Talloires are indicated in the document that you have before you, and I would particularly like to mention on the first page, items No. 3 and 4, which relate to emphasis to be given to the acute respiratory infections and pneumonia, and to mother-care, which is what Pat Rosenfield will be talking about.

We're also increasingly concerned about the D in the Child Survival and Development Revolution, which represents the development process in children depending so heavily on nutrition, which is a particular concern of this committee.

The third annex describes the Bamako Initiative. The African Ministers of Health, last fall, requested the special funding. The devastating economic recession has required some countries in Africa to make cuts up to 40 percent of their health budgets. And UNICEF will supply subsidized drugs in an arrangement to promote self-financed local services. UNICEF has particular capacity through its mass purchasing to meet the essential drug needs of these countries. For instance, UNICEF vaccines cost only a fraction of the usual commercial rates.

Jim Grant asked me to make two specific requests to this committee. The first is, as indicated on page 3 of Jim's letter, to ask your support for Congressional action, and perhaps a resolution, urging U.S. support for the International Convention on the Rights of the Child. A first reading of this international codification of children's rights was completed this month, and has been reported to the U.N. Human Rights Commission. Drafting should be accelerated so that it can be approved by the General Assembly in 1989, which is the 10th anniversary of the International Year of the Child.

The second refers to what you have indicated in the information about the projections for support for the child survival activity. And you will find in Jim's letter his call for U.S. leadership. And we ask you especially for attention to the top item on the graph that we understand the committee has prepared, indicating what the projection is of support for UNICEF, which is projected to go down from $54 to $32 million, which is a very drastic cut. And it also should be recognized that even the $54 million is only 16 percent of all support worldwide for general resources at UNICEF. And it used to be that this committee and other parts of Congress said that 25 percent, 20 to 25 percent, was a more appropriate percentage.

The United States has been very successful in demonstrating to the world our military strength. In a very simple analogy, if one of the two strongest kids on a block makes a point of also being helpful, he will more quickly gain influence among the other kids on the block, rather than relying only on intimidation. Nothing has as much universal recognition of being helpful as care for the children of the poor. And all the U.N. agencies have been drastically cut, but UNICEF depends not on assessed contributions, but on voluntary contributions, both from people and from the Government.

And so the momentum of the worldwide child survival revolution should not slack at this critical time of peak enthusiasm in the developing countries for this activity.

So that as we look to the future, Jim Grant has expressed the very strong hope that two years from now the support for UNICEF will actually be increased, rather than be decreased.

I thank you for this opportunity and will be glad to answer questions.

[The letter from James Grant referred to above, appears at the conclusion of the hearing, see p. 77.]

Chairman LELAND. Thank you very much, Dr. Taylor.

Dr. Merson.

STATEMENT OF MICHAEL H. MERSON, M.D., DIRECTOR, DIARRHEAL DISEASES CONTROL, WORLD HEALTH ORGANIZATION (WHO)

Dr. MERSON. Thank you, Mr. Chairman.

I am director of the Diarrheal Diseases Control Program of the World Health Organization in Geneva, Switzerland. This program was initiated in 1980 in response to a call from all the developing and developed countries for a concerted action against the diarrheal diseases; a condition which each year kills 5 million young children in the developing countries, accounts for one-fifth of all their malnutrition and afflicts every African child at least 25 times in his first 5 years of life. This program, to which the United States of America is a major contributor, represents a truly global initiative to implement the relatively simple approaches that are available to treat and prevent these diseases and to undertake research to discover new tools to strengthen this effort.

The program's major strategy for reduction of diarrhea mortality is proper case management or treatment of cases. It comprises the prevention and treatment of dehydration, which accounts for two-thirds of diarrheal deaths; appropriate feeding of the child with diarrhea, to prevent malnutrition and chronic diarrhea which accounts for 25 percent of the deaths; and selective use of antibiotics and intravenous fluid, to avoid the remaining deaths. Correct application of this approach can dramatically reduce diarrhea mortality and associated malnutrition, as well as hospital costs for diarrhea treatment.

Because of its simplicity and low cost, this strategy is being given priority by the developing countries implementing diarrheal disease control programs, which now cover 98 percent of the developing world population. And these programs are achieving substantial progress, indeed considerably more than was predicted 7 years ago.

For example, in 1986, 60 percent of the population of the developing world had access to the life-saving Oral Rehydration Salts for treatment of dehydration. In 1980, access to these salts was essentially nil.

In 1986, 300 million packets of these salts were distributed worldwide, and two-thirds of them were produced in the developing countries themselves. In 1980, only 40 million packets were available and production occurred in only 13 countries.

In 1986, one- quarter of the more than 1 billion diarrheal cases in young children received these packets or another suitable fluid, compared to less than 1 percent of cases in 1980. Treatment on this scale may have averted three-quarters of a million diarrhea deaths in 1986, and could avert twice as many diarrhea deaths in 1989, and four times as many deaths in 1995.

The program is also promoting four other strategies that can substantially reduce diarrhea incidence for priority action in countries where diarrhea mortality has already been substantially reduced. These are improved nutrition, use of safe water, good personal and domestic hygiene and measles immunization. Assuming that these approaches can be implemented correctly, a 20-percent reduction in diarrhea incidence, that is prevention of more than one-quarter of a billion cases, may be achievable by 1995.

I hope it is evident from these few numbers that this program is having a substantial impact in saving lives and improving the quality of life of the world's children, and has the potential for having even a greater impact in the next decade. As important, national diarrheal disease control programs are strengthening the health infrastructure of many developing countries and thus will facilitate the introduction of other interventions for child survival, such as proper treatment of the acute respiratory infections, in particular pneumonia, which presently cause 4 million childhood deaths annually, 3 million of which cannot be prevented through immunization.

To achieve both of these goals, that is child survival and strengthening of the health infrastructure, bilateral and international agencies must maintain their present commitment to child survival programs. In particular they must support those activities which will ensure the development of a sustained program that will continue to have its impact beyond the year 2000. We have come far in our achievements, but still have the most difficult road ahead, that is reaching those with the poorest access to health care. But we can achieve our task if we work with the developing countries to strengthen their capability to implement programs themselves.

The commitment made by the United States of America to diarrheal disease control and child survival is well-recognized and appreciated by the developing countries and other donors. They and we very much hope that this commitment will be a long-term one as the lives of so many still unborn children depend on it.

Thank you.

[The prepared statement of Dr. Merson appears at the conclusion of the hearing, see p. 85.]

Chairman LELAND. Thank you very much, Dr. Merson.

We'll suspend the questions until after my colleagues have made, if in fact they desire to do so, their opening statements.

Let me recognize first the gentleman from New York, Mr. Gilman.

OPENING STATEMENT OF HON. BENJAMIN A. GILMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. GILMAN. Thank you, Mr. Chairman.

I certainly welcome the panelists and I commend you for holding this important hearing at a very appropriate time. Last week some of us did attend a press conference to commemorate the release of A.I.D.'s third report to the Congress on the Agency's Child Survival Program. And it was a proud occasion, but at the same time somewhat sobering. A.I.D., as we all know, has been a leader in worldwide effort of child survival both in research and in dispensing important supplies around the world, whether it be oral rehydration, immunization, nutrition, or child spacing, U.S. A.I.D. has the expertise and the infrastructure to certainly help us get the job done.

The problem, however, as our panelists have pointed out is that countless children still do die every day, even though substantial resources have been made available. We're pleased that U.S. A.I.D. is committed, and the Congress is committed, but the need is to great that the situation on occasion almost seems hopeless like chipping away at a seemingly impossible task. However, when we read the report that U.S. A.I.D. put out and listen to the success stories of various nations and projects, we recognize that the problem could be resolved if this expert advise were truly followed. The A.I.D. report pointed out in the looking forward section, that the first challenge is to redouble our efforts to reach those countries and those children who've not been reached and to reinforce those programs that have lagged behind somewhat.

The second challenge is to sustain the gains that have been made, and the third challenge is one of research. And the fourth challenge is to look beyond the current priorities and available technologies and plan properly for the future.

I look forward to working with our various agencies and implementing the far reaching and constructive findings that we find in that report. And I think with our Nation's commitment and A.I.D.'s leadership, I'm certain that we'll one day see the end of the suffering among those that comprise the hope of our future, and of course, that's our children. It's for that reason we welcome the expertise of the panelists today to help us in our efforts.

And, Mr. Chairman, if I might ask some questions at this time of our panelists, or would you prefer to hold out?

Chairman Leland. The Chair would prefer that the gentleman would hold his questions until after I've given the other members an opportunity to make their opening statements.

Mr. Gilman. Thank you, Mr. Chairman.

Chairman Leland. Mr. Mfume, the gentleman from Baltimore.

OPENING STATEMENT OF HON. KWEISI MFUME, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. Mfume. Thank you, Mr. Chairman.

I don't have much of an opening statement. I would like to preface my remarks by congratulating the panel of witnesses, a rather distinctive panel of people who've come before us today with interesting testimony, much of which I'm sure most of us on the committee will go over and over again as we sort of review this hearing and assess where we are.

I think that there's probably not a more noble undertaking than to do something in support of children in this world. And I looked and mentioned briefly to the Chairman, a moment ago that the title of the hearing, the fact that there were many successes but much more to be done, was appropriate, and that it was fitting.

And I'm particularly happy that Dr. Taylor of Johns Hopkins University is here representing UNICEF, and the fact that UNICEF has pretty much undertaken the idea of an international conference on children of the street, to look at street children worldwide both here and elsewhere and to try to ascertain some of the elements that exacerbate into this growing problem; the breakdown and support systems and what we ought to do, what we can do, and what we must do.

So, I'm happy to be here. Again, I commend you, Mr. Chairman, on calling this hearing to order, and for convening as you have the distinguished panel of witnesses. I look forward to both their answers to our questions, and to the panel that will be following them.

Thank you very much, Mr. Chairman.

Chairman LELAND. Thank you, Mr. Mfume.

The gentleman from North Dakota, Mr. Dorgan.

OPENING STATEMENT OF HON. BYRON L. DORGAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH DAKOTA

Mr. DORGAN. Thank you, Mr. Chairman.

I, too, want to tell you that I think these hearings are some of the most important hearings that we can hold on this panel. And I note that the witnesses today have talked about oral rehydration therapy, and I would note the Chairman and I have been in Haiti within the last year, out in the rural parts of Haiti which represent the most impoverished areas in this hemisphere and indeed in this world.

And we saw demonstrations of ORT taught by Peace Corps volunteers to mothers and children. A very inexpensive, simple application of something that can save literally millions of lives around the world. And I think what has happened in that area produces some of the best hope for children that I've seen in decades.

Now, that's just part of the story. You know, we've done so much in virtually eliminating small pox and pursuing ORT applications. When you take a look at the number of children born in this world every year, and the staggering number of those children who are not immunized for dread diseases, and then counterbalance that with the fact that we spend $1 trillion on arms every year, at a time when we can't spend the few pennies necessary to provide immunization to the millions of kids against dread diseases, who then die from diseases they shouldn't die from, just because we do not have the same commitment to lives as we do to arms.

I think focusing on child survival is where you start. I mean, you've got to start someplace to try and raise the consciousness of the people in this world about what our priorities are. And if our priorities aren't children, we don't have any priorities. So, Mr. Chairman, these hearings are critical, and I'm excited at the prospect of starting down this road to emphasize how important a priority this subject must be, not just for us in the United States, but for others around the world. We should join hands in dealing with the vexing problems of child survival.

Thank you, Mr. Chairman.

Chairman **Leland**. I thank the gentleman from North Dakota.

I understand the gentleman from New York has to go to another hearing dealing with the issue of the problems of Haiti and, therefore, I will allow him to proceed first with questions of our panel.

Mr. **Gilman**. Thank you, Mr. Chairman.

I'd like to ask the panelists, some of us have expressed some interest in the fortified nutritional foods that should be given in child survival programs. Vitamin A has been recognized as an essential nutritional element for undernourished populations generally, and especially for the under 5 age group that's targeted for child survival programs.

And for that reason, at the present time Public Law 480, title II food aid shipments of nonfat dry milk are fortified at about 5,000 international units of vitamin A per 100 gram ration. However, because of diminishing supplies of surplus nonfat dry milk the Public Law 480 title II program is now using less milk and more of other processed products. And although vitamin A fortification is technically quite feasible and desirable for these other products also, these products are not presently strengthened at the 5,000 international units as is the dry milk. Should A.I.D. and USDA ensure that all of the title II processed in fortified products contain vitamin A at that specified level of some 5,000 units per hundred grams, and if so, what are we doing about it, and if not, why not?

I'd like our A.I.D. witness, particularly, if he could respond to that.

Mr. **Langmaid**. I suspect I'm less qualified than the panel members to my right or my left to answer that question.

I do not deal with the title II budget, per se. And I think the question would be whether or not that kind of fortification reaches the kind of target you would be dealing with for blindness, which is the major concern with vitamin A. A.I.D. is funding directly, several other programs which are testing the broader application of large-scale doses of vitamin A, to see whether it has a broader child survival benefit in the diarrhea area, but we do not yet have the results of those studies. That is a very exciting prospect for vitamin A, which may change its utilization.

Mr. Congressman, I do not know the answer on the title II side of it. I will be glad to get you that information for the record.

Mr. **Gilman**. Could you respond to that query? And, Mr. Chairman, I'd like to ask that the response be made part of the record at this point in the record, when we receive it.

Chairman **Leland**. Without objection.

[The information referred to above appears at the conclusion of the hearing.]

Mr. **Gilman**. And I'd like to pose—would any of the other panelists care to comment?

Mr. **Langmaid**. They may have more technical knowledge on that.

Mr. **Gilman**. Yes.

Dr. **Taylor**. The fortification of foods is technically a very complicated question, and some foods can be readily fortified, others less readily. And it becomes a matter of considerable R. & D. in order to work out the procedures and then to set up the machinery to make it work.

Mr. Gilman. Is that R. & D. underway?

Dr. Taylor. That's what I don't know. I think that most of the work has been done on some of the standard foods, such as milk. And it would take additional R. & D. in order to get into the other substitutes that are now being used. And I have no idea whether that's going on.

Mr. Langmaid. I believe we are working both on vitamin A and iron in the fortification area; both have problems.

Mr. Gilman. Would our other panelist care to comment.

Dr. Merson. I agree that it's an issue that needs study. I think the critical issue with all vitamin A supplementation is whether it's reaching the people that need it.

And I think it's not only the issue of whether or not the food ought to be supplemented, but is the food getting to the population that needs it. Vitamin A deficiency is a very sporadic illness. It does not occur in all countries, and in all areas of all countries. And so I would think the question is a broader one; is it worth doing the R. & D.; is it worth fortifying this product to get to the people. That would be the question, I think, under the title II program——

Mr. Gilman. And how would we determine whether it's getting to them or not getting to them, and what are we doing about determining that?

Mr. Langmaid. In the case of title II, of course, the recipients of title II are targeted for other reasons; vitamin A would be only one reason. You're looking for broad-based nutritional benefit.

Mr. Gilman. Would there be any way of determining whether these kinds of fortified food products are getting to the proper people?

Mr. Langmaid. As I understand vitamin A deficiency, it can be a serious medical problem before there are any outward signs of the deficiency. The blindness aspect is a last stage.

Mr. Gilman. Well, is it appropriate to make this available to all of the children under the age of 5?

Mr. Langmaid. My sense would be that's probably not cost-effective, that a more targeted effort is more appropriate, targeted on where you have diets you know are deficient in vitamin A.

Vitamin A is a vitamin you can store in your system, so large-scale dosage of vitamin A for target populations is practical. Whether smaller-scale doses would have the same cost-effectiveness, I just don't have the answer for you.

Mr. Gilman. Can I ask our UNICEF representative, has UNICEF considered incorporating vitamin A interventions in the package of services that are currently provided to the Child Survival Program?

Dr. Taylor. It's been a part of the UNICEF program for many years. They have particularly been focusing on the provision of capsules with vitamin A on a mass basis in the areas where it has been demonstrated to be a problem. And that epidemiological base of information has been increased now to the point where we can begin to define where the major issues need attention and the program is being targeted very specifically.

But what we really need, I think, is a broader look at all of the fortification possibilities. We just had a meeting last week, and there will be another meeting this week on iodine deficiencies, which are very prevalent, in particularly the mountainous areas of the world——

Mr. Gilman. Will we be doing something to take care of that deficiency?

Dr. Taylor. And that is another new area that is going to be accentuated, particularly in terms of the efforts that are being made now to not only provide the fortification of salt with iodine. And there the important thing is that we've now found that it not only has the visual problem of producing goiter, but more important is that it is related to mental retardation in children in fairly large percentages in the areas where it occurs.

And there again, we are also working on capsules with iodized oil, that would be provided in areas such as Bolivia.

Mr. Gilman. Yes, sir.

Dr. Merson. Mr. Gilman, your question is a very important one, because there's recent evidence that administration of vitamin A may be important, not only for blindness, what's known as vitamin A associated blindness, but it may be that children who are vitamin A deficient may be more likely to die from diarrheal disease and respiratory infection. The reason is that vitamin A is required for the integrity of the cell, of the intestinal cell, and of the lung cell, and the immune response to the infection. There's a lot of very important research going on right now to see whether indeed this is the case.

If indeed it turns out that vitamin A deficient children are more likely to die from their infection, then it will be maybe worthwhile to give vitamin A to children when they are infected with diarrheal disease or with a respiratory infection, not only to give it as it is given now, which is every 6 months, or every 3 months on a pulse basis. I think there's a lot of interest in vitamin A, because of this very recent information, which suggests that it may be very important for reduction of mortality. And I think a priority for WHO, as well as I believe U.S. A.I.D., is to do this research as rapidly as possible, to see whether there is a wider need for vitamin A.

Mr. Gilman. Well, from what you're saying, what both of you gentlemen are saying, it would seem to me to be apparent that there's a need to provide this kind of supplement across the board for children under the age of 5. Is that an impossible task, or too costly a task to do that?

Dr. Merson. I think if I may just follow on. I think if the data does show over the next few years that vitamin A has this broad effect, not only for the eye problem, but the mortality problem, then I think we would have to very seriously look at the cost effectiveness of giving it routinely to children with these infections. I think we'll have that information in a few years.

Mr. Gilman. I hope——

Chairman Leland. If the gentleman would yield.

Mr. Gilman. I'd be happy to yield to the gentleman.

Chairman **Leland**. Thank you. I thank the gentleman for yielding.

Dr. Merson, you said you have to determine the "cost effectiveness." Why do we have to always put costs and the problem of costs in a matter so serious as helping to save lives of children?

Dr. **Merson**. I think it's a sad fact that there will be a cost associated with first of all obtaining the vitamin A. It's only made in a few places in the world. And it would have to be imported into many countries, so there would be capital costs involved, foreign currency involved in importing the vitamin A. Then there would be the problems of delivery of the vitamin A, storage of the vitamin A. Vitamin A decomposes under sunlight. So unfortunately, it's not as simple as just getting the tablet or the drops in the child's mouth. There are going to be costs involved in its delivery. One would want to invest in those costs if indeed it had the impact on mortality, by all means one would want to make that investment. I just think one would need to have numbers to convince health ministers from around the world that it's worth putting the money into vitamin A, rather than into some other program.

Chairman **Leland**. I hope you understand that I don't impose on you personally.

Dr. **Merson**. Sure, I understand that.

Chairman **Leland**. I thank the gentleman for yielding.

Mr. **Gilman**. OK.

Just one last comment. I would hope you could find a way to expedite the research so that it wouldn't take a couple years if we're losing these many children each and every year. As time goes by if we could prevent that in expediting the research, prevent that kind of loss in the intervening time, I think it would be extremely important. I would hope that whoever's involved in administering that kind of research could help to expedite that process.

Thank you, Mr. Chairman.

Chairman **Leland**. I thank the gentleman from New York.

I understand, too, that the gentleman from North Dakota is going to have to leave, and I certainly want him to have the advantage of questioning the panel.

The gentleman from North Dakota.

Mr. **Dorgan**. Mr. Chairman, I would—we've been talking about a very broad worldwide effort here, and I'd like to focus it, if I might, on Central America, just for the moment. And ask a couple of questions of the representative of U.S. A.I.D.

The chairman of the committee, and I, and others on the Hunger Committee have been pursuing an initiative that was part of legislation before the House of Representatives recently, on the subject of nonlethal aid to the Contra soldiers. We put together a separate piece on that, that would provide for a child survival fund to be targeted to that region in Central America where the children are the victims of prolonged fighting across the Nicaraguan borders. Some $14 million in a children's survival fund targeted at those areas was part of the plan that was first adopted by the House and then on final passage, lost by a handful of votes.

The point I wanted to make is that we on the Hunger Committee really developed that plan and added it to the package that was being decided by the House of Representatives on the Contra soldiers. Unfortunately, that plan is not now law, but there will be another consideration at some point of Contra humanitarian aid, and I intend at that point to make certain that anything that is considered with respect to Central America have attached to it, a children's survival component. It breaks your heart, frankly, to walk in those refuge camps and see the children with limbs blown off, and the children who are sick and should be treated, but there's not medical treatment available, and see the children who are hungry because there's not enough food in the refuge camps and other places. You can't understand what it's like, I guess, until you walk on those borders between Nicaragua and Honduras and El Salvador, and Guatemala. So I feel very strongly about that.

I'd like to ask Mr. Langmaid, as I understand the current situation, programs in support of child survival in Central America will apparently decrease by about 20 percent, at least as it's projected in the administration's budget. Could I ask why that is going to occur?

Mr. LANGMAID. Mr. Chairman, I have data for all of Latin America. I do not have a breakdown of just the Central American component. Our figures for the Latin American program would have $25 million in Latin America in fiscal year 1988 from the Development Assistance (DA) Child Survival Fund, and $25.1 in 1989, roughly a straight line. That is for all of Latin America. I have not done a sub-breakdown just for the Caribbean or Central American countries.

Mr. DORGAN. Well, I have the information for Belize and El Salvador, Guatemala, Honduras, and they total somewhere around $25 million in 1987 and $15 million in 1988. And I have the country-by-country breakdowns. And I guess the point is, that things aren't getting better, they're getting worse. Funding is declining rapidly. Those children down there desperately need help and the question is, why would the Child Survival Funds targeted to that area decrease at a time when I think the need dramatically increases?

Mr. LANGMAID. Do the numbers, Congressman, that you're using include the 1987 ESF supplemental, because there was $10 million in the 1987 supplement used in Belize, Guatemala, Honduras, and El Salvador.

Mr. DORGAN. My understanding is that the numbers are inclusive of the original appropriation, plus the supplemental.

Mr. LANGMAID. Then you're dealing with essentially a straight line.

Mr. DORGAN. If you would provide for the committee records, the numbers that you have so that we can reconcile exactly what's happening, I would appreciate that.

Let me observe that in my judgment A.I.D. needs to try and target additional resources to that region.

[The information referred to above appears at the conclusion of the hearing.]

Mr. DORGAN. Let me ask a second question, if I might. I know that you do have some small program in El Salvador in which you are dealing with all civilians in El Salvador that have had some problems such as limbs blown off from landmines, and trying to provide prosthetic devices. You have a program of that nature going on, I think around a $3 million program for all civilians in El

Salvador. The question is, would you oppose broadening that program to include more than just all civilians in El Salvador, and include a young child who's living in a refuge camp on the Honduras border, who's had an arm blown off, or a young child on the Guatemalan border? Would you be inclined to want to try and broaden that?

Mr. **Langmaid**. I'm not equipped to deal with the practicality of that. I'd be glad to ask our Latin American Bureau to comment. My experience with these programs is more in the Middle East and the Lebanese situation, where we've had similar kinds of programs dealing with prosthesis and other kinds of damage, and the administration has always been fully supportive of that kind of an effort. But I'm not at all familiar with the particular practicality in problems involved in the Latin American context.

Chairman **Leland**. If the gentleman would yield.

Mr. **Dorgan**. Yes.

Chairman **Leland**. I'd like to ask Mr. Langmaid to have whoever it is that is authoritative in this area, to respond for the record.

Mr. **Langmaid**. Of course.

[The information referred to above appears at the conclusion of the hearing.]

Mr. **Dorgan**. Dr. Merson.

Dr. **Merson**. Very briefly, Mr. Dorgan, perhaps you know this, but I believe last year or the year before at the World Health Organization, there was adopted an initiative for Central America, in health. And since then additional support, in addition of course from the United States, but I am aware that the government of Italy, and the EEC and some other European countries are also providing a lot of humanitarian assistance, very much targeted toward child survival. That information could be gotten for you, if you were interested.

Mr. **Dorgan**. Thank you. I appreciate that.

And frankly, when we had a discussion on the floor of the House recently about the children's survival component of this package, we had folks some to the floor and rail against this, saying, "My God, you're going to help the Nicaraguans, the Sandinistas." If you give aid and comfort to the children who have lost limbs, or a burn victim, or are sick and in need of treatment, somehow that gives comfort to the Sandinistas. I find that a twisted, contorted logic that is unacceptable.

But I guess the point is, that sick, suffering children are not capitalists or communists; they're not Nicaraguans or Hondurans; they're just simply sick, suffering children. And we have a special responsibility, I think, in that region to target some special help to those kids on all sides of the border through international relief groups. We're not talking policy or politics, we're talking help.

Dr. **Taylor**. Yes, I'd like to follow up on that by saying that UNICEF since it was established has had the policy of working on both sides of every conflict area. And there are various items that relate to what you've just said.

One is that more children died in El Salvador in 1984 from the easily preventable diseases that we're talking about, than from all war deaths, and from assassinations, and all. This is a continuing emergency that we're talking about.

The other thing is that as you probably know, for the past 3 years the only thing that has stopped fighting in Central America has been the three immunization days. They've called them days of peace. And on specified days, largely as a result of the influence of the Catholic Church, the fighting has stopped in order that immunization teams can cover the whole area. And in 1984 when they first tried it, only 40 percent coverage was achieved. In 1987 80 percent coverage of all of the children in the battle areas with immunization was achieved, and now in Beirut, just last month, they had a similar stopping of the fighting in order to have immunization occur.

Mr. **Dorgan**. Well, you know, those are the kinds of things that make a person feel good about public policy, when you see those kinds of things happening.

And if you might indulge me for one further question, Mr. Mfume probably has interesting questioning, and doing other things as well. But I would like to ask one further question to clarify something in the debate on the floor of the House on this Children's Survival Fund. And I know I'm focusing here only on Central America, but I'm doing it for a specific purpose. It was alleged when we said, look we're just dealing with kids, kids who need help, this is not policy or politics. It was alleged by some, you can say whatever you want about giving this money to international agencies, international relief groups, but the fact is when they operate inside Nicaragua, they're operating inside a country that's communist, they're going to do what the communists want them to do, and we can't control the money.

Now, we're going to have that discussion and debate again. Of course, I said that was rubbish, but they're talking about UNICEF and the International Red Cross. Could you describe for me your impression of what you're doing when you're inside a country like Nicaragua. Are you dancing to the waltz played by the Sandinistas, or are you just helping kids outside of the politics of the region?

Dr. **Taylor**. UNICEF has field personnel right out where the action is. And those personnel have the responsibility of seeing to it that the distribution of resources and of services is targeted to what UNICEF's obligation is, which is children in greatest need. That is the only criterion that determines where UNICEF support goes. The level of need of the children, and within any country that policy holds.

In any of the conflict situations which UNICEF has been involved in on both sides of the border, they have always been able to maintain this independence of the political constraints, in all of their programs. Otherwise they're not there.

Mr. **Dorgan**. Now, you work, obviously, hand in hand with the Red Cross, and others. Is your observation the same for the other agencies?

Dr. **Taylor**. Yes. I think that the international agencies that are working in these situations have just made that as a firm policy.

Mr. **Dorgan**. How would you respond to those who make the——

Dr. **Taylor**. That they haven't been there. They don't know what's really going on.

Mr. **Dorgan**. You have, and you do?

Dr. **Taylor**. Yes.

Mr. **Dorgan**. Well, let me just say thank you to all of you have testified. I think it's excellent testimony, and I hope the result of this hearing is to raise the consciousness and awareness of a critical problem.

And, Mr. Chairman, thank you for calling on me.

Chairman **Leland**. Before the gentleman from North Dakota leaves, let me just raise the issue of Haiti. I've named the gentleman from North Dakota as the Chair of a task force on Latin America and the Caribbean.

We found on our visit that no more than 25 percent of the children of Haiti had been immunized against preventable diseases. And we got that information from the on-ground forces of U.S. A.I.D. And they suggested to us that by the end of 1988, if they were able to wage a campaign, that no more than 50 percent of the children, total, would be immunized against those preventable diseases.

Dr. Taylor, why is it that we can immunize only 50 percent of the population of children in Haiti from diseases that can be prevented?

Dr. **Taylor**. One of the important things that's come out in the reviews of the immunization programs thus far, has been that immunization has progressed most rapidly in situations where they have infrastructure of health services. They have the personnel and the facilities, so that you have something that you can build on when you go into these areas, do immunizations, or do any of the other programs, the respiratory infections, and so on, that we talk about. That they depend on infrastructure, particularly if you're going to have sustainability.

You could go in and do a campaign, but then if you don't sustain it, that doesn't mean very much. And it's the sustainability that has led to the focus on infrastructure and building it into the primary health care activity.

Now one of the things that we've seen happening, as a result of the child survival emphasis has been in countries that don't have the infrastructure, which is what we're talking about with Haiti, that it takes awhile to build up the capacity in order to begin to reach the people. But if we don't concentrate on developing the program, such as immunization, in a way that will build up the infrastructure, then the takeoff can occur. And it may take several years to get the first levels of immunization reached through a program, if you are deliberately building up the capacity. And then after that has been built up, you can begin to achieve the kind of coverage that we know we must have. And so, the important thing is in a country such as Haiti, we can't do it as a short term effort. We've got to do it in order to build up the capacity and keep it going once it's started.

Chairman **Leland**. Thank you, Dr. Taylor.

Dr. Merson.

Dr. **Merson**. Very briefly, Mr. Chairman, if I may comment on that very important question. I think it was Vince Lombardi, the famous Green Bay Packer coach, who told us to be quick but don't hurry. And I think that we have to be very careful here. We only had 5 percent immunized 10 years ago. If Haiti is up to 50 percent, that's remarkable.

Chairman **Leland**. It will be if it continues toward full coverage.

Dr. **Merson**. Right. But I mean if we can get a country up to 50 percent, I think we should see that as tremendous progress, or even 40 percent. And then I think in child survival, we've got to be in this a little bit for the long haul. I don't think we should see this as we're going to reach levels of 60, 70, 80 percent over the next 2, 3, 4 years. There are going to be parts of the world where it may take as long as 10 years, or 15 years to reach acceptable levels.

I think one of our concerns in the program I run, is to maintain general donor support not for 1 or 2 years, but really to the year 2000. That we've got to see this an effort that's going to take a little bit of time in the poorest parts of the world. The risk in campaigns that we're seeing, and there are many examples of these, is that we get high rates of coverage, 80 to 90 percent, and the next year we're down, as Dr. Taylor has said, to 20 to 30 percent, if we don't have the infrastructure. So we not only have to push these programs, but at the same time we have to work with countries in developing the infrastructure.

Chairman **Leland**. Well, Mr. Merson, I appreciate your pragmatism. I have a real problem between that and my idealism, though; there is a serious conflict in what you're talking about, especially when I have held little children who I know are not with us today.

Dr. **Merson**. Sure.

Chairman **Leland**. In a somewhat makeshift structure in City Sole in Port-au-Prince, Haiti.

Dr. **Merson**. I've been there.

Chairman **Leland**. I know you have. And I appreciate what you're saying, but my problem is trying to figure out how we rationalize being able to land people on the Moon. The Soviets are talking about going to Mars. We do all these incredible things and yet we can't immunize 98 percent of the children in Haiti.

We're now very excited. Some of the Texas delegation, not necessarily including me, are very excited that we now have a big Naval operation coming to Corpus Christi, and some of that is going in right down the road from Houston, 50 miles down the coast in Galveston. For this big Navy operation, the Corps of Engineers has done some incredible things, and will do more incredible things. You talk about infrastructure, both of you, and the lack thereof. It seems to me that if we put our heads and minds to it, that, in fact, we could do a lot to shorten the process, to commit our resources to doing things to help to save the lives of a lot of people, and especially children.

Dr. **Taylor**. Right. We agree that we could shorten the process. It takes money.

Chairman **Leland**. It seems to me that we ought to engage in some real budget transfers from that incredible military——[Laughter.]

Dr. **Merson**. Mr. Chairman, it not only takes money, but the developing countries themselves all have to have that kind of idealism that you have. You know, the developing countries that are the poorest spend the most money themselves on arms. And so it's an issue not only of the donor community, but also of the developing countries themselves and getting them committed to the same kind of goals and ideals that you are speaking about.

Chairman **Leland**. Well, I certainly agree. But, you know, one of the primary promoters of those people spending moneys on arms, do you know where it comes from? Right here. I mean, our Defense Department advocates that we've got to help our friends to build this incredible military machine.

In Haiti, we're willing to give the Haitian Government money for arms if they ever get their political act straight. I know that they asked for more arms and so forth, but that is crazy. My real problem, too, with Haiti, by the way, is that that's in our hemisphere. That's literally next door. We helped to prop up an incredibly bad government for many years in Haiti. We did so much to abuse Haiti. We reaped a lot of profits. We exhausted the natural resources of that country and it seems to me we owe them a whole lot more. I'm not talking about Ethiopia, Communist Ethiopia. We're talking about Haiti, our next door neighbor, if you will. There's something contradictory about all of that.

I'm sorry about the editorial comments. [Laughter.]

Let me begin my formal line of questioning.

Mr. Langmaid, my question is straightforward, and as you can see, I'm rather straightforward. Congress has made clear its intent that child survival programs expand and clearly, equally so, that addressing of the development crises in Africa is a top priority. It is also clear that the means exist for an effective expansion of child survival activities. Your Agency has very encouraging statements to make on child survival programs. Your own statement today says that A.I.D. remains committed to a focus on child survival. Now, despite all of this and despite increased congressional funding for African development programs, A.I.D. is spending less money in 1988 than in 1987 on child survival in Africa. A.I.D. is also proposing to spend less in 1989 than in 1987. Can you explain the difference between the congressional intent, Agency rhetoric, and these spending allocations?

Mr. **Langmaid**. I will not deny, Mr. Chairman, that the funds are declining in those 2 years. There are a number of problems in terms of individual programs that I won't go into. There are also a number of competing claims for resources. It is our intention, as an agency, to honor the congressional earmarks in legislation, mandating levels for health and child survival in Africa. We are looking very carefully at the African program itself, in terms of where one can do more with child survival funds. I think the tables that have been shared with me, somewhat overstate the case. But I'm not here to say there isn't a concern in terms of the total resources.

Our own data for 1988 and 1989 would show a $25 million level, roughly, of child survival activities in 1988, and a similar level of child survival activities in 1989. This compares with a level of around $33 million in 1987. There are some programs that are going up in time, and some programs that are going to go down, and some that have a difficulty. Whether this is an adequate level to get the job done, is something that we look at very carefully. We are still in the process of sorting through in the African fund, the portion of funds going to health and child survival and how much of the health activities will in fact be involved in child survival activities.

I do not want to say these are in any respect the final numbers, but they are the current estimates and the trend line is something that I, myself, as chairman of the working group have discussed with the Africa Bureau. We are looking at whether or not these funds will in fact accomplish the kinds of objectives we've set for ourselves.

Chairman LELAND. Typical of me, let me make another editorial comment, if you don't mind.

It seems to me that there could be no explanation for anything other than a healthy increase in child survival numbers for Africa which would make sense. The need is greatest there. The need for external funding, the needs of millions of children subject to recurrent drought and famine, chronic malnutrition, these needs must be met. The prospect for dramatic success in terms of expanding the reach of primary health care services for children is greatest in Africa. Are we going to be a major player in providing child survival programs for the children of Africa, or are we not?

Mr. LANGMAID. There is no question the need is greatest. The level of child survival coverage in terms of immunization and ORT is lower in the African countries than in any other part of the world. The needs are equally great for agricultural production to avoid continuation of starvation in the African area, equally great for natural resource protection, which is seeing the desert creep slowly south. We are in a tight budget situation that requires looking very carefully at each of these areas, and what is the relative payoff in terms of what one can accomplish. In some of the African countries it's very difficult to make progress. The necessary health infrastructure is not in place. You're talking about sporadic intervention. That's not good enough to get these levels up to a high level.

I do not deny the seriousness of the problem. But when the bottom line is reached in terms of budget, we have to make tough decisions.

Chairman LELAND. Mr. Langmaid, can you help us? We continue to ask for more A.I.D. money to go to Africa. One of our counterparts in the Congress last year asked for a cut from what we had originally asked for the whole Continent of Africa, save Egypt, from $585 to $500 million. Then we had to go and scrap and fight like heavyweight champions, if you will, to get the $85 million put back into the budget. But it seems to me that somebody in the administration is not helping us very much, when in fact, you know, the whole Continent of Africa suffers tremendously from greater poverty than any other continent at this time. Some of the poorest pockets of poverty amongst nations are on the Continent of Africa. And yet the administration continues to ask for less and less, or demand less and less from the Congress to be spent in these areas.

If in fact we could get the cooperation from U.S. A.I.D. to become staunch advocates for increased expenditures, it seems to me that the administration just might get more sensitive about what our real needs are.

Mr. LANGMAID. I think we all do, Mr. Congressman, under the budget ceilings that have been negotiated. We are fighting within a relatively flat trend line in terms of total resources.

Chairman Leland. Can you go to war with us against a military budget that continues to escalate at the cost of programs like these that I know you personally would like to advocater?

Mr. Langmaid. I don't feel I carry an awful lot of spears into the battle.

Chairman Leland. Spears? [Laughter.]

Mr. Langmaid. I'm the spear carrier in this operation.

Chairman Leland. Well, it happens that these programs are spear catches. And that's really—that's awful. What you and I need is some means by which we sensitize the administration, and I know that the folks at U.S. A.I.D. are very good people and you operate pretty much at the dictates of these so-called parameters, the Gramm-Rudman parameters, the fiscal-conservative parameters, the save-the-American-people parameters—you know, from these "evil welfare programs spending monies abroad to help people" versus all of this money that we are spending on MX missiles and B-1B bombers, and star wars and all these kinds of things. The money is there. The money for us—if we can spend $1,500—Dr. Taylor, Dr. Merson, you tell me what you can do with $1,500—for a coffee pot to put in an airplane? Or $500 for toilet seats—and I'm talking military aircraft—$500 for a toilet seat in military aircraft? What could we do with just $500 in Haiti in immunizing children?

Help us——

Mr. Langmaid. Do you want me to——

Chairman Leland. No, no, no. I'm not going to let you off the hook that easy. [Laughter.]

I didn't hear you say anything, by the way, when we were talking about what we could do along the borders of those countries in those military conflicts. Does it matter to U.S. A.I.D. whether a country is communist or not, whether they're engaged in battle or not?

Mr. Langmaid. We have very strict legislation that limits our involvement in all those kinds of situations.

Chairman Leland. Can you testify for us in Congress, for us lifting those restrictions so that you can get involved in some of these communist nations——

Mr. Langmaid. I think——

Chairman Leland [continuing]. Helping those poor children?

Mr. Langmaid. I believe in the past the administration has testified in support of notifying certain of the limitations in section 620 of the Foreign Assistance Act.

Chairman Leland. In Angola and Mozambique——

Mr. Langmaid. I'm not familiar with individual cases, but section 620 of the Foreign Assistance Act does place certain limits on where we can work.

Chairman Leland. Mr. Mfume.

Mr. Mfume. Thank you, Mr. Chairman.

One of the downfalls of being a freshman member of this body is that aside from having to go out and get reelected to prove you didn't get here by fluke, you always get to ask questions last after most of the questions you wanted to ask have been asked. [Laughter.]

You know, Dr. Merson, you and the chairman went back and forth on immunization, so that took that question. And Mr. Gilman brought up the subject of nutrition, so I had to throw that away. And Mr. Dorgan talked about Central America, and so I'm in a position now of not having a whole lot to talk about but I still believe that the last shall be first.

And with that in mind and on behalf of all the other people who find themselves in this unenviable position, let me just broaden, if I might, for just a moment the discussion, and ask you gentlemen if you would assess in your own words for this committee of the Congress, the amount of progress made by your organization or other organizations, or other efforts, in the last several years in confronting the ever evolving, and the ever enlarging magnitude of the problem of child survival? Can you tell us just how far we have come, and more importantly perhaps, how far we must go, both in absolute and in relative terms?

Dr. MERSON. I'll try.

I think if one looks at the two major child survival programs at the moment, which are the immunization program and diarrheal disease control, ORT, I think acute respiratory infections and safe motherhood need to be added to that. But at the moment, we've got diarrheal disease control and immunization as the main two programs.

My understanding is that these two programs probably in 1987 avoided 2 million deaths together, something like that. That's pretty good for a mere 7, 8 years, when you realize how much progress has been made if you go back to 1980. And I think all those that have contributed to this initiative should be very proud of that, especially in a world that as the chairman has mentioned is a very complex, with money going to many other less philanthropic things.

I think though the challenge we face, Mr. Mfume, is that as I mentioned in my summary, we now have to reach the most difficult people, the most difficult children, those that don't have easy access to health services; those that are not within 5 kilometers of a health facility; those that don't have a village health worker a 5-minute walk away. These are difficult children to reach, and especially in Africa and Haiti, and what's called the least developed countries. There are about 37 of them in the U.N. system, classified of the least developing countries.

And in fact, if you look at what's happened in the past 10 years, you will see that progress in child survival has been made not in the least developed countries, but in what we would call the transitional countries, those countries that are between the developed countries and the least developed countries.

The big challenge we face now, and the reason why we need the United States of America and other countries to maintain their commitment, not for 1 or 2 years, but for 10 years, is that we've got to get to these children in the least developed countries where the access is the most difficult. And that's going to take a little bit more time, and a lot more effort and a lot more commitment from the countries themselves.

So in summary, I think we've made tremendous progress. I think we've avoided probably somewhere around 15 percent of the total child deaths already. But to reach the kind of impact that I think you and your committee would like, we need a bit—I think we're going to need more time and more patience to get to the children in the least developed countries. And my concern, and our organization's concern is that people become disappointed if results aren't achieved overnight. And this sometimes leads to campaigns and a lot of short-lived efforts which are not sustainable. And what's critical, I think, the message I would like to give you is that you see this as not something that we're going to do in 1 or 2 years.

We've made progress. I think the progress will continue. The three agencies at this table work very closely together in this initiative. But we need a little bit more time, and in some places probably a lot more time than others to achieve our ultimate goal which I suspect would be to do away with about one-half of the infant and young child deaths, maybe two-thirds of the infant and young child deaths that can be avoided by immunization, diarrheal disease control, treatment of acute respiratory infection, and the safe motherhood program which will provide children which are not low birth weight, which are more likely to die.

I think, that's my appeal, sir. Thank you.

Mr. MFUME. Dr. Taylor?

Dr. TAYLOR. Yes. I would first like to comment about the situation in Africa from the point of view of UNICEF.

This year for the first time, the UNICEF programs in Africa have been greater than their programs in Asia, in terms of the money spent. And this has been a trend that has been going for several years, and it indicates the recognition of the fact that even though the population density is much greater in Asia, the programs are going to where the needs are greatest.

The general question that you asked is very much on the minds of those of us who have been spending our lives trying to do something about this problem. And the thing that I see today that was not present 10 years ago, for instance, or certainly not 40 or 50 years ago, is that there is a new ethic in the world, a global ethic of concern about people in need that makes it unconscionable to permit the continuation of what we have accepted in the past as being normal. The idea that poor kids died was normal. It's not normal now. And we went from being concerned only in times of emergency, which we have traditionally responded to, but now we are moving into a whole new era where we are concerned about the silent emergencies; the situations where children, especially, have no hope for the future because we are not doing what we can do.

The second big change that I see at the present time, is in the knowledge, technology, skills, and ability to bring about the changes that we're talking about. It is cost effective because the costs are so low, and we are particularly concerned that we make the best use because of the limitations on funding, and that it go where it will save the most lives, and, therefore, what we now have is the ability to do things that just were not possible 20 years ago. There's a whole new era of simple, direct methods that can be applied right at the level of the home, which is the important change that I see. It's not a matter of hospitals. It's going out to where the people are.

A third major change that was not present a few years ago, even, 5 years ago, is the whole new understanding of social mobilization, which is something that UNICEF particularly has done a great deal to develop the methods so that we can go directly to the leaders of the country and get them to give the first immunization in an effort, or we can go to the people themselves and get them to create what we call community demand for all of the good things that we're concerned about. And the development of a new understanding of social mobilization, I think, is one of the major reasons why we are now making a difference in the kinds of activities that we are promoting.

And finally, I think that the most important think is that we have demonstrated clearly, as a result of the past few years, that it's possible to make the changes that we are talking about. And I was fascinated that my friend Koye Ransum Kuti, who is minister of health of Nigeria, told me recently, that his—well, he said in public in a meeting, that the big worry is not the commitment of the people in the developing countries. The big worry of the people in the developing countries is the commitment of the donors, because so often we have started something and then we give up and we go on to something else. And their big worry is they have to pick up the pieces when interest shifts from a program; is really what's going to happen over the long pull, and whether the donors are going to have the commitment for the continuity.

Mr. MFUME. Thank you, Mr. Chairman.

Mr. LANGMAID. Can I comment on the question also?

Mr. MFUME. Please.

Mr. LANGMAID. Our goals for the Agency are to seek a reduction in the infant mortality rate to 75 per thousand. We feel confident we will now meet that goal this year or next.

Mr. MFUME. This year or next?

Mr. LANGMAID. This year or next. I won't be precise, but we're sufficiently close to that goal, which we set for ourselves by 1990. We are now confident we can meet it.

Our other goals involve reaching 80 percent coverage of immunization by 1990 in A.I.D. emphasis countries. We are confident now that we will reach that in Egypt, Ecuador, Honduras, Peru, and Kenya.

Mr. MFUME. That's even though you're reducing the amount of aid?

Mr. LANGMAID. Yes. The programs are funded in those countries and they have been receiving funding to continue those programs. We are close enough to achieving our goals that we feel reasonably confident of projecting that we will do so—if there's no civil disruption or other intervening circumstances—under current trends.

In spite of some of the funding concerns you raise, A.I.D. has a large and successful child survival program in Africa. It is called the CCCD Program. Where that program operates, it has increased coverage substantially. In the Congo coverage is now from 58 to 75 percent. In Zaire, coverage has increased for immunization by 39 percent over the last 4 years. In Liberia, the coverage for immunization has increased as well. So there are some bright spots. There are also some less bright spots. The level of ORS use in Sudan, which has a serious problem, remains terribly low. The level of

ORS use in a number of the African countries is far less than the access to ORS, which reflects not the lack of availability of the salts in the market place, but the lack of a whole range of supporting educational training, and other kinds of infrastructure to teach people how to use these life-saving salts effectively. And that's a pattern we're finding in a number of countries. We can get the access to the salts up through the marketing process, but there's a whole range of other issues you get involved in if you get into the effective use.

I also need to go back to a comment I opened with. A number of the vaccinations require three vaccinations over a period of time. The problem of getting that same child back within the right intervals of time to deliver that vaccine is a huge management problem. And until we can find a way of combining those with a single vaccine, we will still fall short in some countries. I believe it's the measles vaccine that cannot be given before a certain age, and a number of children are dying from measles before they reach that age. Until we get a vaccine that enables us to deal with that problem, we will still not reach all the children effectively.

Something like 800 million people in the developing world suffer from malaria. A large portion of those are children. We do not now have a vaccine to prevent malaria. We are working very hard on that, and there are some encouraging breakthroughs, but there are also some discouraging aspects. This is a very complicated research problem, and we may not yet have the tools to develop a vaccine in the relatively near future. So I don't want to mislead you that there are solutions to all the problems, but we are concerned and we are working on them.

Thank you.

Mr. **Mfume**. Thank you, Mr. Chairman.

Chairman **Leland**. Mr. Langmaid, I get disturbed every time I hear this kind of response, and I understand the pragmatism in all of this, and the realities. But it just bothers me, shakes me, as a matter of fact. And what I'm concerned about is the fact that aid, or at least our U.S. Government contribution to UNICEF, is possibly going to be diminished. Why do we advocate that we diminish the contribution to UNICEF?

Mr. **Langmaid**. I'm sorry, Mr. Chairman. That isn't even within our Agency's budget. That's handled by the IO appropriation. If I had known you were interested, I could have brought either someone or some information on their budget process.

Chairman **Leland**. Can you please——

Mr. **Langmaid**. I'd be glad to get that information. I apologize for——

Chairman **Leland**. I certainly would appreciate it, because—I'm sorry that you can't answer that question. But I'll tell you it is just unbelievable. Just listening to the magnitude of the problem, when in fact UNICEF has done such an incredible job, and not only that, other PVO's who we relate to all the time, you relate to, you contract with, and so forth, on the ground, doing these incredible things to help child survival. And I know the economic realities, but at the same time needs are growing and the contradictions are just there. I mean we spend continually more moneys for arms than we do to help these suffering people.

Mr. **Langmaid**. We work very closely with UNICEF, and my Agency does make extra budgetary grants to UNICEF for discrete programs. But we are not the responsible agency for the line item budget for UNICEF, or the other international organizations.

Chairman **Leland**. I understand. Well, we'd appreciate any kind of information that you can deliver for the record to us.

Let me now acknowledge the presence of the gentleman from Mississippi, Mr. Espy. I appreciate his arrival, and ask if he might have some questions at this time.

[The information referred to above appears at the conclusion of the hearing.]

Mr. **Espy**. I do, Mr. Chairman.

Let me first apologize to you for coming in late. The chairman is aware that we're considering the budget resolution on the House floor, and I do have a part as a member of the Budget Committee. I'm twisting a few arms, and making sure that we have a successful outcome on the budget today. I hope that the question I have for Mr. Langmaid really isn't one that's redundant.

My question does concern funding for A.I.D. and the ramifications on this budget resolution. I'm a strong supporter of child survival programs worldwide, especially those in our own country. I also sit on the Budget Committee, and am very interested in funding levels.

I notice, without accounting for inflation, the A.I.D. Child Survival Action Program grew by more than 18 percent a year between 1985 and 1987, reaching nearly $185 million in 1987. But for fiscal year 1988 this figure is projected to begin declining more than 9 percent this year. And we do have some graphs that the committee has provided for me, which tends to illustrate this quite clearly.

So my question is, given strong congressional support for these programs, why are they shrinking?

Mr. **Langmaid**. For the Child Survival Fund itself, we have requested a level for 1989 which is the same as the Congress provided us in 1988, which is $66 million. The total that you refer to, I believe, is the total from all accounts, which would be the portion of the funds from agriculture, health, and other accounts which are used for child survival activities. Our initial estimate for 1988 was somewhere around $160 million.

We have not yet gone through all the other accounts and projected how much of those will be used for child survival activities. If you take out, as I would, in terms of looking at trend lines, the El Salvador supplemental, which was a $10 million increase in one time, we're talking about a $10-million decrease in the total over this period from 1987 through 1988 and probably 1989. In the context of the other major new initiatives that we've been asked to fund, like basic education and natural resources, we had to do some reallocation, because the totals are staying the same. My job is to make sure those funds don't result in a diminution of the program. There will be some decline as we make room in the budget, which has been straight lined for those other initiatives.

Mr. **Espy**. I noted particularly that the level for Africa is projected to decline by nearly one-third this year, at a time when the overall funding for Africa is increasing. According to committee calculations, child survival activities represented 9.4 percent of

A.I.D. expenditures for Africa in fiscal year 1987. This percentage drops to 4.6 percent in fiscal year 1988. If the percentage for 1988 would be the same as 1987, that is 9.4 percent of A.I.D. Africa money for child survival, you would be spending more than $52 million for African children in need this year.

So my question is, why was the percentage of African money spent on children reduced, and can we get it up a little bit higher?

Mr. LANGMAID. I don't want to play percentage games with you, Mr. Congressman. I agree. I saw the table when I first came in, and the numbers for child survival between 1987 and 1988 are roughly the same estimates I'm using. The 1987 number is $33 million rather than $36 million, but that's a question of which accounts you counted from. Our own estimate for 1988 is in the $25 million range, so there is a decline there.

However, I do have some problem with the table, because when the Africa fund was created by the Congress in 1988, they combined both ESF and Development Assistance Appropriations into one account. And so the Africa totals which is comparable for 1987, is in the $500 million range.

Chairman LELAND. Well, you know why we did that, don't you?

Mr. LANGMAID. I'm fully aware of why you did it. I'm just trying to say for the record at least that for the numbers to be comparable between the two, one needs to also add in the ESF number, so you know what the competing claims are.

As I testified earlier, too, our commitment as an agency, is to ensure that the child survival job gets done. The new Administrator has reaffirmed that commitment. There will be ups and downs in the budget, and there will be competing claims in that budget. We have had some areas of real progress, as I mentioned in Africa, and we have some problems which are just plain tough problems to deal with. They're going to take longer. I'm not sure about more money, but constant perseverance in building the infrastructure is required.

Mr. ESPY. Thank you, Mr. Chairman.

Chairman LELAND. Mr. Langmaid, you stated in your testimony that A.I.D. intends to provide more than $25 million to U.S. PVO's for child survival activities in 1988. How much of this amount will flow through the A.I.D. office of private and voluntary cooperation?

Mr. LANGMAID. I think the number is $10 to $12 million, Mr. Chairman. In 1988, $12.7 million is the current estimate.

Chairman LELAND. It's $12.7 million?

Mr. LANGMAID. That's correct. That is child survival funds in addition to $2 million of agriculture funds, I believe, for vitamin A, which also counts as part of the child survival activity, for a total of $14.7. But in terms of the Child Survival Fund, just so I'm clear, $12.7 million.

Chairman LELAND. Well, the committee would appreciate very much project-by-project detail on how you plan to reach this amount in 1988, if you don't mind.

Mr. LANGMAID. I have no objections to providing that information later in the year, Mr. Chairman. A substantial portion of that is the competitive grants program, which hasn't been awarded yet.

Chairman LELAND. I understand.

Mr. **Langmaid**. A sizeable portion, I believe, and it's in our congressional presentation, is for the Rotary Polio Plus Program. That's several million. The rest of it is for the Competitive Grants Program. As soon as those grants are awarded, we'd be glad to provide that information to you.

Chairman **Leland**. Please do. We would appreciate that, and any other updated information that you can provide regarding that, we'd appreciate it.

The Chair has many more questions to ask of the gentleman from U.S. A.I.D., as well as Dr. Taylor from UNICEF, but we don't have an inexhaustible amount of time to do these hearings. It's unfortunate, because we feel that the kind of information that you have available for us is invaluable to us for the Congress and its future considerations.

Let me thank you. We will keep the record open, however, for questions that we have remaining, for the purpose of entering your responses into the record. Thank you very much for your participation.

Dr. **Taylor**. Thank you.

Mr. **Langmaid**. Thank you.

Chairman **Leland**. By the way, Dr. Taylor, please convey my deep regards and warmly felt sentiments to Mr. Grant, who is just an outstanding individual.

Dr. **Taylor**. I'll be glad to do that. Thank you.

Chairman **Leland**. Thank you very much.

The Chair would like to now invite the next panel. The second panel consists of Michael Gerber, president of the African Medical and Research Foundation; Patricia Rosenfield, program officer at the Carnegie Corporation of New York, and an expert on maternal and child health issues.

We will hear both of your brief statements and then continue with some questions. We thank you for your patience, your perseverance, your attendance, and your contribution.

Mr. Gerber, you might proceed.

STATEMENT OF MICHAEL S. GERBER, PRESIDENT, AFRICAN MEDICAL AND RESEARCH FOUNDATION

Mr. **Gerber**. Thank you very much. We are heartened by the comments from the Congressman from Baltimore, who said the last shall be first. It's almost like being at the Capitol Center and watching a basketball doubleheader with Georgetown playing Syracuse in the first game. Then the administration leaves and 19,000 people clear out of the Capitol Center. But we will hope to add a number of comments, hopefully, relevant ones to the remarks that have been made this morning.

Chairman **Leland**. Once at a Democratic convention, I was slated to speak, and took on the task to speak immediately following Senator Ted Kennedy. And this was a big national convention, and as soon after he spoke, and he gave one of those rip roaring speeches that he usually gives, all of the cameras left, all the people left from the halls, and I was there speaking to the chairs. And so I understand fully what you mean.

But let me assure you that your comments will be registered in the record, and considered as helpful and as invaluable as those of the people who spoke before you.

Mr. **Gerber**. Thank you, Mr. Chairman.

One advantage of going on later in the program is that you're almost tempted to set aside your original remarks and deliver a second set of remarks addressing some of the points that were made by the first panel of speakers, and what I will do is try to work in a couple of responses to some points that were made earlier this morning, from the prospective of a private voluntary organization carrying out child survival programs.

We appreciate the opportunity to testify before the committee, and what I'll do this morning is briefly summarize a number of points that we've already presented in written testimony. The major purpose is really to highlight a number of factors that we feel need to be in place before an organization can successfully start up and implement child survival programs.

There's a premise upon which we're really basing these remarks. That is, based on our experiences we've learned that a number of child survival interventions are very difficult to implement. And that not only are they difficult to implement, but they're also difficult to start up. I think the record has proven this to some extent. A number of organizations, ours included, have been able to overcome the start up difficulties.

What I'd like to do is just mention a couple of factors which will allow for successful implementation of child survival strategies. These include, No. 1, prior experience with immunization and other child health related activities; No. 2, the linking of a voluntary agency's activities with National level EPI or immunization programs; No. 3, the need to concentrate on interventions for mothers as well as children. And I won't dwell too much on that, because Pat Rosenfield will speak in detail after I finish. And No. 4, an ability to integrate child survival, or as we prefer to say, child health projects, into broader based community health care schemes.

Our organization, AMREF, the African Medical and Research Foundation, feels that these factors can be used as criteria by donor agencies, such as U.S. A.I.D., in determining the awarding of funds and priorities for programs.

I would like just to take a minute or two to present some background information on our organization which will put my comments into some context. We're a voluntary organization, a private voluntary organization, founded in 1957. We have, for 31 years, been delivering a number of health programs specifically in Eastern and Southern Africa. We have, by design, focused the core of our operations in East Africa. Our operational headquarters are actually in Kenya, and we've kept our operations in the United States rather small. We have a full-time staff of roughly 650 based in Africa. About 93 percent of that staff are African.

We started out in the late 1950's delivering health services to remote rural areas using light aircraft and mobile teams. People dubbed us the flying doctors, very quickly, and that name has kind of stuck. However, that no longer really represents the scope of what we do. Because beginning in the late 1960's and early 1970's we began to focus on areas of health education, health training, primary health care. And that now has become the major focus of our program. We're implementing programs on the ground in Kenya, Tanzania, Uganda, Somalia, and Sudan. We have worked in Ethiopia and countries such as Zambia, Malawi, Botswana, Lesotho, and Zimbabwe. We work very closely with ministries of health, and provide technical assistance to the ministries in a number of the countries that I have mentioned.

For the past 10 years, we've worked closely with the governments in developing what we call broad based community health care schemes. This is focusing health care at district levels, and utilizing a health center as a focal point for a variety of health programs, which would include utilizing community selected and trained primary health care workers, integration of nutrition programs, family planning programs, and water development programs. We're doing a number of these kinds of projects. A key one is in the Kibwezi area of Kenya, which is a project for a target population of about 150,000 people, most of whom migrated into this area from other parts of Kenya in the last 20 years. And we have developed the Kibwezi Program in conjunction with the Swiss government, some funding initially from U.S. A.I.D. and the Kenyan Ministry of Health. A health center has been developed along with a variety of outreach activities into the communities.

Now, to also put the factors that I mentioned earlier this morning into further perspective, I would just like to review in the next minute or two, a number of child health programs and interventions that AMREF has been involved in for about the last 25 years, prior to our receiving a U.S. A.I.D. grant in 1986 for a specific child survival program in Kenya. We have lengthy and varied experiences with a number of child health strategies and interventions. This goes back to when we were founded in the last 1950's. We began a mobile unit, running mobile clinics specifically for nomadic groups, the most difficult to reach populations in countries like Kenya and Tanzania. And in that period of time since roughly 1960, or about 28 years, our mobile teams and other staff have administered nearly 2 million inoculations to nomadic populations and other groups in Kenya and Tanzania.

Linked in with our immunization programs has been a heavy emphasis on maternal and child health programs, and the utilization of antenatal clinics in coordination with immunization programs. In the late 1980's we, as a professional health organization, realized that in dealing with the child survival necessities, that family planning needed to be an important component of any health programs, especially in countries where we operate, such as Kenya which has probably the highest birth increase in the world, about 4 percent. So with the support initially of a grant from U.S. A.I.D. we established a family health department at AMREF, which focuses specifically on integration of family planning activities into our broader primary health care programs, focusing on MCH activities. And this department has done a number of interesting things over the years, including the utilization and training of traditional birth attendants and local shopkeepers as advocates for family planning.

Another component that we've been interested in related to child survival or child health activities has been nutrition. Through a major grant from a private foundation in the United States we have established a nutrition rehabilitation program as part of our ongoing activities. It was interesting to listen to the discussion earlier on the potential utilization of fortified foods to deal with vitamin A. I was listening to that from the prospective of a voluntary organization dealing with nutritional programs at community levels. And our response would have been somewhat different, or our answers to the questions would have been somewhat different.

We place great emphasis on nutrition rehabilitation programs, nutrition education, and the utilization of locally available foods that meet many of the vitamin supplements. It's a lot more cost effective to get people to develop green gardens, than to try to fortify milk and other products and ship those products from the United States or Europe, or elsewhere. And we've been doing a number of these nutrition type of interventions now for many years.

There are some other programs, but I think I'll cut those short. The point that I'm trying to make is that all of these experiences were in place long before we received a child survival grant U.S. A.I.D. in 1986. And we feel very strongly that these kinds of past experiences were crucial to our implementation of the U.S. A.I.D. Child Survival Program. The A.I.D. child survival grant allowed us to target three specific areas in Kenya. One is Masailand, which is an area heavily populated by the nomadic Masai tribal group, where it's estimated—and we don't know for sure, because it's very difficult to collect base line data in area such as this—it's estimated that the infant mortality rate is as high as 140 per thousand.

Second is the Kibwezi area, where I've mentioned we have a broad based community health care program; infant mortality rates are 100 per thousand. And the third target area which A.I.D. is helping us to impact are two slum areas in urban Nairobi. It's our first attempt to work in an urban situation—we've always focused on rural areas—where the infant mortality rates are roughly 80 per thousand.

And I'd like to interject a comment here on the question that was asked to the initial panel at the very end, in terms of successes and what the future really holds. And I'm a little worried when the comments are made that our goal is to achieve a 75-percent infant mortality rate, or let's say in a country like Kenya, an 80 percent coverage rate. That really doesn't tell the story. I mean, in essence these are rates which are achieved because you can reach the most accessible portions of the population. And in almost all of the African countries, as we all know, as high as 80 or 85 percent of the populations live in rural areas, and many of them live in areas that are not very accessible. So I would advocate that in a country like Kenya, although you're talking about an average infant mortality rate of between 75 and 80, that really doesn't tell the story of those most in need. And I guess from a voluntary agency's prospective, we tend to focus on the most under served areas in these developing countries.

Now let me conclude this oral presentation by going back to those criteria which I set forth at the beginning, and take a look at our U.S. A.I.D. child survival implementation in light of the criteria. The first one I said was prior experience with child survival activities, such as immunizations, ORT, family planning, and nutrition. As I mentioned, our experiences allowed us to begin implementation very quickly because of previous experience in two out of the three areas. Interestingly enough the area we had the most difficulty with was in the slum areas of Nairobi, and basically because we lacked prior experience working in urban areas. And as I mentioned we feel past experience is very important, because the track record shows that many organizations, voluntary organizations, as well as governments and others, have difficulties in starting up and implementing these child survival programs. Immunizations are not easy programs to do, both from a point of resources and from the point of infrastructure. And the experiences are really very beneficial.

Criteria two, was linking child survival programs with government EPI programs. We, as an organization, have worked very closely with ministries of health. We continue by coordinating immunization strategies with the Central Ministry of Health of Kenya, the ministry of health at the district levels in which we operate, and the district medical teams in Masailand and Kibwezi, and the Nairobi City Council. And we feel, as a voluntary organization, it's crucial that one of our priorities is to work with government in helping strengthen an infrastructure, because when this A.I.D. funding ends and AMREF services might no longer be neededd—it's this infrastructure that will be primarily responsible for continuing these kinds of activities.

The third criteria I had said was targeting mothers as well as children. I mentioned a few things that we've had experiences with. We've integrated additional nutrition activities, additional family planning activities. We're focusing very heavily on tetanus toxoid injections for expectant mothers, and we were able to fold this in with increased funding from A.I.D., into basic programs and experiences that we already have.

The last criteria I had mentioned, was the integration of child survival strategies into broad based community health care programs. As already described, we have these programs. These include immunization, family planning, and nutrition activities, water development, training of village health care workers, and utilization of a health facility as focal point for district level programs. With an infrastructure already in place, it became "relatively easy"—and I'm using that term relatively in quotation marks, as well as the term easy in quotation marks—to include and/or expand immunizations, ORT, and other child survival interventions. So with A.I.D.'s child survival grant we did not really get involved with new kinds of activities. It really allowed us the capability to expand what we already knew how to do and add additional targets for expanded coverage areas.

I hope this brief presentation gives you some idea of what we feel are the important elements of child survival programs. I will be happy to respond to any additional questions.

I would like to make one final comment based on another point that was raised during the earlier part of the panel. It was specifically raised in relationship to Nicaragua and Central America. I'm not qualified to speak about Central America, but there are some implications of that question which relate to what I would call the political implications of health interventions. And we've had some experiences with that in Africa. And voluntary organizations have somewhat of a different prospective than government. I mean, we feel our charge is to deliver services to those that need it most, wherever they might be.

I would like to say that of all the various kinds of programs in different sectors, health is probably the least political of all. And I would like to emphasize that point. And as a voluntary organization with ties to governments throughout East and Southern Africa, we've been successful when there were border conflicts between Somalia and Kenya, while the border between Tanzania and Kenya was officially closed, to have representatives from ministries of health of Somalia, Kenya, Ethiopia, Tanzania, and Uganda, come to AMREF in Kenya for a number of health programs, health education programs and health development type sessions.

And with that remark I will conclude.

[The prepared statement of Mr. Gerber appears at the conclusion of the hearing, see p. 87.]

Chairman LELAND. So it can be done?

Mr. GERBER. It can be done, yes. And I'll be happy to answer any questions.

Chairman LELAND. Thank you.

Ms. Rosenfield.

STATEMENT OF PATRICIA L. ROSENFIELD, CARNEGIE CORPORATION

Ms. ROSENFIELD. Thank you very much, Mr. Chairman. In addition to all the other problems of coming last, the worst thing is to come last right before lunch. As this committee knows so well, low blood sugar levels are not so conducive to listening. But I have an advantage, in that I am going to talk about a subject that has only been touched on peripherally by the other speakers this morning. And I hope to stimulate some interest, and, again, would be delighted to answer questions on this at the end of the presentation.

I have also submitted a longer testimony for the record, which I would like to have placed in the record. I've chosen to highlight some points which are included in that testimony, but to add a couple of other points based on the comments made this morning, and some additional thoughts I've had.

Chairman LELAND. Very well, and without objection, your comments in full will be submitted for the record.

Ms. ROSENFIELD. Thank you very much, Mr. Chairman.

I am delighted to be able to testify this morning on the Child Survival Revolution. It is clear from the previous presentations that it is rapidly approaching success in many areas, although there are problems that have been identified. However, at the same time that there are the specific problems that have been raised this morning, there is one central component that is essential for the success of the Child Survival Revolution. And that has not been addressed to the same degree of attention. Without addressing that component it is very unlikely that the child survival revolution will be sustained and will last a sufficiently long time to have the hoped for impact on future generations.

That component is beyond what has been talked about in the UNICEF/GOBI efforts. It is not growth charts. It's not oral rehydration. It's not even breast feeding. It is not immunization. Child survival depends on the health, the good health, and the well being of the child's mother. The child's mother and the child are one unit from birth—pardon me, from conception. And it is from the moment of conception when there needs to be sufficient care given to the mother, so that at the end of this process of gestation, the outcome is what all hope for, a healthy living baby, and a healthy living mother.

But care cannot end, as the Child Survival Revolution has indicated, at birth. And the linkage between mother and child does not end at birth. As Dr. Taylor has said, the mother is responsible for child care and health of the family. Health care in 75 percent of the developing countries takes place in the household, and it is the mother who provides that health care for the child and her family. The mother provides that health care not only through her own behavior, not only through the water that she provides, but also especially in Africa, the mother is the main income earner providing for the education of the family and for the health care expenses of the family. So she is responsible not only for transmitting knowledge about health to her children, but making it possible for her children to be healthy and for her to be healthy as well.

A year ago February, the World Bank, UNDP, and the World Health Organization organized the International Safe Motherhood Conference in Nairobi, Kenya. At that time it was clear from the presentations there that the mother-child balance in the Child Survival Program needed to be redressed. One indicator of the impact of the unbalanced efforts of the past programs is that there is far greater disparity today between the developed and developing countries in maternal mortality rates than exists in infant mortality rates. In low-income developing countries a pregnant woman is 70 times more likely to die than her counterpart in a developed country. An infant is nine times as likely to die.

When a woman dies in childbirth, her infants and young children often do not survive as shown in studies from as disparate places as Bangladesh and Nigeria. In one study, when a woman died in childbirth in Bangladesh, 95 percent of the time the child died. In the study in Nigeria, 58 percent of the children died if the mother died in childbirth. Whereas 71 percent, and even more in some cases, survived if the mother survived.

There is a Nigerian saying that sums this up that I'd like to share with the committee; that is, "A mother is like gold, as compared to the father who is more like a mirror." The mother is solid and provides for the family. No offense to the gentlemen in the room, of course. [Laughter.]

And I'm not a mother, at least not yet.

But there is no question that the infant mortality and the child mortality and the maternal mortality statistics are deplorable. But the maternal mortality differences are shocking and inexcusable.

In reference to your comments about Haiti, in Haiti, 367 women out of 100,000 die in childbirth, whereas in Puerto Rico, which is not so far away, 11 out of 100,000 die. And right next door in the Dominican Republic, 56 out of 100,000 die.

Chairman **LELAND**. How many in Cuba?

Ms. **ROSENFIELD**. I'll tell you right away. I think it's closer to 11. Let me tell you exactly after the presentation.

Chairman **LELAND**. OK.

Ms. **ROSENFIELD**. But the maternal mortality differences, in my opinion, are even more shocking at this point in time in 1988, and more inexcusable because we know the risk factors. We know the causes. And we know the minimum requirements to reduce those risks and eliminate those causes for the most part.

Briefly, I would like to summarize what these risks are so that you may see that this is not an unreasonable, infeasible, too idealistic program. The risks for women who are pregnant can be summarized very easily. If the woman is too young, too old, and she's had too many babies, or if she's had them too close together, she is a high risk candidate for complications that will lead to death. The obstetric causes which account for about 75 percent of the deaths have been documented time and again. In fact, they occurred in this country before we had modern medical care implemented in many places. The woman has 2 hours to get a blood transfusion before she dies if there's excessive bleeding at childbirth; other causes are excessive infection; toxemia, which leads to high blood pressure and something called eclampsia, which causes a woman to go into a coma and is most likely to die; obstructed labor; and, unsafe, illicit abortion.

The previous health condition of the woman before she has a child is also a problem; anemia, hepatitis, malaria, and sexually transmitted diseases are all risk factors. Moreover,there are 5 to 10 percent unpredictable complications. And that leads to the next problem as to why maternal mortality still remains a serious concern in developing countries; that is, the lack of appropriate health and social services. There's a lack of treatment for complications; a lack of referral services; a lack of appropriately trained staff; a lack of staff to begin with, but appropriately trained ones as well; a lack of transport services; and as Mr. Gerber has said, a lack of family planning services in many cases. But the obstetric causes and the health and social service causes, are not the only two sets of causes for this problem.

The social and economic factors are of fundamental concern to the health of women and their children. A low level of education or no education is a major cause of maternal mortality. It is a catalytic factor that leads to higher mortality. Lack of access to health care, not because it's too distant, but because the woman doesn't have the time or the money to get there, or has other responsibilities, such as her work in the fields, is another cause. Also, malnutrition. One more sticky problem is the low social status of women; especially in some ethnic and religious groups, women do not have a role to play in their own care during child birth. It is decided on by other members of the family. And, as Mr. Gerber has said, the lack of social support mechanisms at the community level is another major social factor that leads to a woman's death.

Thus we know the risks, we know the causes, and the solutions are actually very straightforward. There needs to be better training for attendants at the community level and at the health center. In the United States, 98 percent of the women who give birth have trained attendants. In many developing countries, fewer than 20 percent of the women have trained attendants at birth. Attendants need to be trained, and the mother can be trained also to recognize some of the simple risk factors. The health worker doesn't need to be a traditional birth attendant, although in many cases it would be appropriate. It could be any community health worker trained to recognize when to refer the woman and who is the one who is at most risk from these high complications that will lead to death. Community workers can give prophylaxis for malaria, or folic acid, or iron tablets to reduce anemia. Therefore, they need to have nutrition information. They need to be trained to use monitoring devices, following in UNICEF's footsteps. They need to know how to keep conditions clean and hygienic when the woman is having the baby, especially in the uncomplicated births.

And to keep it clean, WHO has been proposing a safe birth kit. Keeping it clean requires soap. It requires a nail brush, so that the dirt under the fingernails of the birth attendant doesn't infect the woman or the baby. There needs to be a string to tie the placenta, and a razor blade, a clean razor blade, to cut it. And then for the baby, the most costly item, a 1-percent silver nitrate solution, because of the risk of blindness from gonorrhea that affects the baby. Moreover, these attendants at the community level need to have access to a referral system. At the referral hospital, it gets a little bit more costly, and a little bit more difficult, but linked to ongoing services, there need to be blood transfusions, antibiotics, ability to monitor blood pressure, and, most importantly for the high risk complications, surgical interventions and trained surgeons.

But these do not have to be done independently. We do not want to recommend an independent maternal survival service. These services can be linked with ongoing child survival efforts, and if linked with the ongoing child survival actions and EPI, and the nutrition programs, and all the other activities—and I'd just like to add at this point, I did work for WHO for 8½ years, so I have seen these programs in the field, they do exist in many places—there should be savings in human and financial resources. The concern about cost effectiveness would of course be met, because you'll increase the number of patients, and when you increase the denominator, you will increase the effectiveness and reduce the costs in a population sense. Thus a maternal survival program can build on existing programs, and provide the stability and sustainability for family health. The outcomes from this investment will ensure not only sustained child survival today, but will greatly increase the likelihood that the women who are born today will be healthy enough to bear healthy children and be the productive mothers of the 21st century.

Thank you very much, Mr. Chairman.

[The prepared statement of Ms. Rosenfield appears at the conclusion of the hearing, see p. 94.]

Chairman **Leland**. Thank you very much, both of you, for your compelling testimony.

Let me now go right into the questions, and we will have other questions I'm sure that will be submitted to you in writing, and hopefully you'll be able to respond and we'll leave the record open for that purpose to receive those responses.

Mr. Gerber, are the needs of African children in your opinion, increasing or decreasing? A very simple question.

Mr. **Gerber**. It sounds very simple. But I don't think the answer is that simple.

Based on our experiences, I think there are two answer to that question. And I think I alluded to that in oral testimony I made. In some parts of Africa, and let me speak to the areas that we know best, and where we work, I think we're achieving a great deal. But in other parts of the same countries, and not very far away, a great deal remains to be done. And I've given a couple of specific examples with regard to Kenya, just using infant mortality rates, where you can have infant mortality rates as low as 70 to 75 per thousand in certain areas, and as high as 140—120 to 140 in other areas. And geographically in terms of the miles apart, they're not that great. In terms of the infrastructure that's available, in terms of accessibility, they are tremendous.

Chairman **Leland**. Are you aware of any reason why the U.S. Government should begin reducing its funding for Africa's children?

Mr. **Gerber**. We, as an organization, do not feel very comfortable with that. I can give you a very specific case in point. We submitted three different child survival grants to U.S. A.I.D. for funding over a 3-year period, one in 1985, one in 1986, and one in 1987. Out of those three only one was funded. The submission, the last submission in 1987 specifically targeted on South Nyanza Province in Kenya. It is probably the least—except for the nomadic areas—the least served in terms of infrastructure and services available in all of Kenya. In what we call the settled areas, it has both the highest infant mortality rates, and the highest maternal mortality rates in the country.

We developed a program to try to work with government and some other agencies, including UNICEF to impact on the South Nyanza region. The program was highly supported by the U.S. A.I.D. mission in Kenya. We know that it was rated No. 1 priority in terms of funding for child survival activities in country, yet the program was not funded, if for whatever reasons. Granted, there are many worthwhile programs to fund even in the child survival area, but the bottom line is there should be more money being made available, not less money being made available.

Chairman **Leland**. What are you doing—what do you do when in fact those moneys are not made available?

Mr. **Gerber**. I'll tell you what we did. And we didn't have to go very far. The Dutch Government was very interested in South Nyanza Province. They had targeted that area as well. And as soon as we were turned down by U.S. A.I.D. for funding for the South Nyanza project, Dutch Government has made a commitment to work with us and the Ministry of Health in Kenya in getting some programs off the ground in South Nyanza.

But that in this case was a very fortunate situation. It's not an easy answer in many other cases. In many other cases, the need just continues, because there are no resources available to respond to that need. And we would hope to see an increased commitment to both Africa and child survival funds on the part of the administration.

Chairman **Leland**. Let me throw you a curve. Something that has not been raised today. I had to visit Africa about five times last year. I went to Kenya and I went to Zaire. One of the recurring issues that came up as I talked to many of the officials there, on both sides, our folks and their folks, was the issue of AIDS, and the growing problem of AIDS. Can you just comment briefly on AIDS as it relates to child survival, if you will?

Mr. **Gerber**. Very briefly, because in essence, I mean, hopefully that one day even your committee might want to set aside a separate hearing for this issue, which in Africa, is going to be a very, very major issue. It already is to a great extent. It's a very politically sensitive issue, but one needs to keep in mind the concerns of the African governments and the African peoples, and there's a need for the governments to deal with their problems. They're going to need help, and the political climate, is already starting to change. And there's a much more openness to recognize the potential magnitude of the problem, and to look for some assistance in dealing with that problem.

We, as an organization, have now for 2 years had a number of AIDS programs, mostly in the area of health education. Working with the governments specifically in Uganda and Kenya, we've done some general health education as well as specific training programs of laboratory technicians to develop capabilities to doing blood testing.

But with relationship to child survival, it's a very difficult question because in Africa, the main focus of transmission is heterosexual transmission. And—we might say, the greatest at risk group are sexually active people from teens until 30's, 40's or whatever the case might be. And as Dr. Rosenfield has already said, the social system, the existing social structures are so key in the whole child survival effort, the need to focus on the mother—and we would even go beyond the mother, but focus on young girls, adolescent girls, especially with regard to nutrition programs. And unfortunately, these other groups, that are at the greatest risk in this whole AIDS issue, and some of our own staff, many of them working in a number of rural areas, have reported their observations to going into some villages and seeing only old people and young kids. A whole generation to some extent, has disappeared.

Numbers are small. I don't want to magnify the problem beyond what our observations were. It might be a small village of 100 to 200 or 300 people, but you only see young children or old people. And both those young children and those old people are totally dependent on their children, their sons and their daughters, who are the heads of families to take care of them. That is the social structure. And that's the great fear, or one of the great fears of this whole AIDS issue, is that it will have a very, very serious impact on the social structure and the economic implications related to that.

Chairman **Leland**. I find it incredible that we spend $585 million on aid to Africa, the Continent of Africa, and yet we have this impending problem. We know that one of the primary sources of the problem of AIDS even in this country is derived from Africa, and it's just incredible.

Mr. **GERBER**. If I just might add, Mr. Chairman, interestingly enough, we've been able to respond very early on, mainly because we have an overwhelmingly large number of African staff and the Africans perceive us as an indigenous resource. We have been begging, in this country, for the last 2 years for funding for a number of our AIDS interventions. I mean, begging. I'm carrying the proposals around. I never go anywhere without a proposal. And we have had the most difficult time generating any funding at all. And we would hope, specifically with regard to U.S. A.I.D. and this administration, that when they clarify what they're going to do, vis-a-vis their AIDS strategy, that they will recognize the significant role that voluntary organizations will be able to play in this epidemic, and hopefully develop some strategies which will take advantage of some of the resources that the voluntary agencies will be capable of providing.

Chairman **LELAND**. A thought just occurred to me. Why don't you, in your proposal, instead of calling AIDS, call it Contra? [Laughter.]

Ms. Rosenfield.

Ms. **ROSENFIELD**. That might work.

I would just like to add on the AIDS problem, a little bit on the statistics that might clarify some things. We don't really know the extent of the AIDS problem in Africa. And one of the things the World Health Organization—and I'm sorry Dr. Merson isn't here, but having worked there, I will take the liberty of talking about what they're trying to do—is trying to do is to develop a coordinated effort at the country level for AIDS. The reason why the separate agencies that can provide funding are achieving less success in dispensing their funds may be because the countries are trying to coordinate efforts themselves. For instance, Zaire, had been very difficult—there was even a report on McNeil-Lehrer that said that they had denied the existence of the problem—which was immediately followed up by Jonathan Mann, who is the director for the AIDS Program in WHO, announcing a very successful donors meeting this year for AIDS in Zaire where they have raised about $40 million; Zaire is now coordinating this effort. And money does come from the United States, as well as other donors. So the countries are trying to play a coordinating role in order not to scare their people, and to make sure that the program can proceed in a rational, calm, and effective manner.

Of course, in Africa, the AIDS problem is affecting women enormously. I hope that in this case it would be a maternal and child survival program, because in fact if one can, as Mr. Gerber was saying, reach the women, and try to offer them special education and special protection, this will be the most effective way of preventing children from getting AIDS. And one must remember that women in Africa are in many cases, as in this country, the single head of household. They are faced with men who come back after migrating for short periods of time to the city, who come back with infection after work in the urban areas or work in other countries; this is one of the sources of the problem that has to be addressed, and why it might spread to rural areas.

Mr. Chairman, I would just like quickly to go through the statistics in Africa, because it does point to the need for paying some attention to the maternal health problem. We know the statistics about infant mortality and life expectancy. In Kenya, for example, between 1965 and 1984, the infant mortality for those under age one, was reduced from 113 to 92. Child death rate was reduced from 25 to 16. That's because of the extensive efforts of the agencies. And that must be continued. But we haven't a clue about the maternal mortality statistics. What we do know is that in many areas of Africa, those statistics reach over 1,000 women per hundred thousand deaths, compared with Cuba, which is 31 out of 100,000, which I just looked up. So this is a terrible situation, great disparity——

Chairman LELAND. That old communist Cuba.

Ms. ROSENFIELD [continuing]. We don't know about it enough. What?

Yes. They're doing quite well in their health care.

Chairman LELAND. Well it has to do with priorities.

Ms. ROSENFIELD. I think in addition infrastructure is always important. Community support is always important. Money is always important. But without the commitment at the highest levels of government to improving the health of people, nothing will happen. It will not be sustained, and I think this requires a major effort. And perhaps greater funds—I'm not sure money is needed for this, but greater attention and working more closely with countries, as Dr. Merson was saying earlier, trying to work with country identified priorities. If they haven't identified maternal survival and child survival as priorities, although many of them have, to try to work with them to show them the data, to show them why it makes sense from an economics as well as a social development perspective to invest in these programs. But it does take working with countries to help them shift their priorities, or at least strengthen their priorities to these kinds of programs.

Chairman LELAND. Let me say to you that I know that there's been a lot of emphasis on child survival for all the right reasons. And, not necessarily at this hearing, a lot of talk about women and development. Congresswoman Pat Schroeder and I have introduced legislation, as a matter of fact, that deals with women and development, trying to target some of the very specific problems with women and development in the areas that you've alluded to. Not as specific as you have talked about, but we do care. We do have a growing interest, as a matter of fact, in addressing those problems. And I wanted you to know that we're very sensitive.

Let me ask you one question. We do have other questions that I'm going to submit to you in writing and ask that you would respond to, if you will, for the purpose of the record.

A number of witnesses have referred to the horribly low rates of coverage for tetanus shots given to pregnant women. What can be done to increase the coverage as rapidly as possible?

Ms. ROSENFIELD. Thank you.

One of the reasons women do not utilize the EPI programs is because they may not see the benefits to themselves. And if there was more specific attention, and I have talked about this with a number of community health workers in the field, if women realized that some of the care that was being given under the child survival programs also would improve their own health, and perhaps were to expand, not just provide tetanus/typhoid, but also nutrition counseling and other risk monitoring at that point, attendance would increase. If they can accomplish more than one thing at the time when they have to go to the health center, you will find an increased utilization of health services.

I think women want to improve their own health. They want to improve the health of their children. And if you can combine the two, you will see greater utilization of the services. There is a problem. Women are responsible for hauling water and raising crops. You know from the women and development program—all of the work that a woman does, 16 hours a day just on things for other people besides herself at the household, to have to go to a health center, wait on line, and get the immunizations; all this means a real cost to her in terms of time, even if we can't calculate it very accurately in terms of money costs. And that's why it's not only tetanus toxoid, but some of the statistics that we heard about, outside of the big campaigns, are a result of the fact that women do not have the time to go to the health center. And sometimes even the mobile units do not reach everybody, because women are in the field, they may be out of town that day, there are markets taking place.

So one needs to look at what is convenient for those women and to try to provide services that fit into their time needs, not into the time needs of the health services. And I think you'll see an increased utilization of services when that happens.

Mr. GERBER. If I might pick up on that. We're in total agreement with the points as made about trying to reach women. There seems to be much less problem in terms of getting to the youngsters for immunizations. I mean, the mothers have a definite commitment to the care of their children, much more strongly than they do for their own care of themselves. And one of the targets that we're focusing on are the traditional birth attendants. I mean, that is usually in a village setting, the one health care—and I'll use that in quotation marks—worker that an expectant mother will come into contact with at some time during the course of her pregnancy; and we try to build in an expanded role for the traditional birth attendants through training.

And with specific regard to the tetanus toxoid vaccination, one of our dreams is to see some technology developed which would—it sounds very James Bondish, but to get an inject-a-capsule, with a tetanus toxoid vaccine, that upon injection will self-destruct. In the sense that it will destroy itself to the extent that it cannot be used for any other purpose, and therefore, after that injection would be given, there would be no ramifications from reuse of this needle or injector, or for any other purpose as well.

Chairman LELAND. You're talking about the needle being——

Mr. GERBER. No, we're talking the capsule itself, and the injector, so that if an injection is given, the injector will no longer be able to be used for anything.

Chairman LELAND. Is that technology available?

Mr. GERBER. It's coming along. And we are specifically working with another voluntary organization in Seattle, WA, called PATH, in trying to develop tests for this technology, because we would hope that if the technology improves, you could allow the TBA's, if they're trained, to reach pregnant women with regard to potential tetanus vaccinations.

Chairman **Leland**. Which raises a totally different issue, but very much related. And let me just ask both of you to respond.

I have introduced legislation to create an international health corps. I was spurred to introduce this legislation primarily because I have spent a lot of time in Cuba, which is why I raise the issue of Cuba. I've spent a lot of time in Israel. I've spent time in many countries in the world, and particularly in the Third World. And I find that we have been outdistanced in a lot of ways by countries like Cuba. It has very few resources, but in Nicaragua, we hear of the horror of how the Cubans have trained Sandinistas and so forth, and so on, through the military, but they also send teachers and health personnel, many of them. In Ethiopia, I remember in 1978, 1979, I can't recall the time exactly, maybe even before that, Cubans sent about 300 doctors to Ethiopia. That matched equally the number of doctors that were already in-country in Ethiopia for a population of 42 million people. I thought that was an incredible overture. And the long-term effect of that is that the people who do not necessarily care about the soldiers who are supposedly helping them to protect their borders along the Ogaden region, certainly remember the doctors who were caring for them, and thus the Cubans have done an invaluable service to their foreign policy relationship, their diplomatic relationship, with Ethiopia.

I care more about the goal of helping suffering people, but also in trying to sell my colleagues on things like this, we have to be also practical and self-centered to some extent. So as a result of that I have determined that where we are to wage war is in the field with health care professionals, for the purpose of serving the interests ultimately of the people in those countries, who are suffering, but also achieving political goals. Not with an orientation session, but we should be helping people to survive through health measures.

What are your comments about developing something on the scale of the Peace Corps itself, but an international health corps where we can go with our expertise and technology to place like Haiti, or Ethiopia, or Angola, Mozambique, and the difficult places in the world, as well as those places that are not politically difficult to get into, Zaire, Kenya, and so forth?

Mr. **Gerber**. I think as a former Peace Corps volunteer, myself, I'm very empathetic to the idea. I think that there would need to be a number of considerations to enable it to work effectively. And two that come to mind immediately is one, I think it needs a long-term commitment on the part of those that are willing to serve. I've seen the Cubans and Ethiopia. I've seen them in Gorder, and I've seen what they're doing, the good and the bad as well. And the perceptions of the Ethiopians that work with the Cubans is mixed to some extent. Which is natural. But one of the advantages the Cubans had, is they've sent these people over for a long-term commitment. When I say long-term commitment, anywhere from 1 to 2 years, or even more than that. That's No. 1.

And No. 2, the Cubans have a very, I think, interesting perspective of public health, and the needs of public health in developing countries. And I think it would be crucial for Americans to be involved, especially American medical personnel, that they have a broad public health perspective, because that's really what the needs are going to be. So I think if we can match our enthusiasm and our expertise with the needs, it could probably be very effective.

Ms. **Rosenfield**. Well, I'd like to comment on that, and perhaps provide a different prospective.

I think there will not be improved health in the most rural, most vulnerable, most peripheral areas of developing countries, until people in those communities are able to assume some measure of responsibility for their own health, and do not need to depend on external sources for that health.

That having been said, I think that defines a program that could be very effective, that is not only providing treatment, because providing treatment is always a band-aid solution. It has to be more of a training and preventive type of program. My concern about calling it an international health corps, unless it was made very clear, is that you might reach only the medical, and I'm an economist not a medical doctor, you might reach only the medical professionals, and those who look at themselves as providers of care, not necessarily providers of prevention. I think it's extremely important to give visibility and prestige to prevention. Still you see in the maternal mortality area, we focus on the clinical problems more than the preventive problems at this point.

Even in child survival it's very much clinical in its orientation. I think a preventive orientation which has a great deal of training, communications, the social support systems we've both talked about, is necessary to ensure sustainability at the local level. So that the long-term commitment is not only from that individual who's going to the field, but also from that community and the households where they're—the Corps members—working themselves. Then I think it could be very effective. And if it's linked with government programs to strengthen what they already want to do, but may not have the staff to get out to all these places, it could then have a major impact—it might self-destruct. It might in fact not need to stay in business forever, because the communities will be able to be better informed and to increase their concern for taking control of their own lives.

Chairman **Leland**. Well, let me say that we've taken all of that into consideration, and very definitely believe, as you do, about building a health infrastructure, for not only curative measures, but also preventative measures to be taken in order that we can, in the long term, teach people in a sense how to care for themselves. I accept your admonitions very deeply.

Ms. **Rosenfield**. I'd just like to add one thing. And we haven't had a chance to talk about this today, but I'm sure you've gone into length about this in the women and development discussions. Without having a counterpart or complementary education corps for formal education, it perhaps will be even longer term than the training that we're talking about. And so, I would see the importance of linking this with schooling, and with adult education programs, to ensure that it isn't just a long-term program, but that change starts right away.

Chairman LELAND. Sure.

More specifically about the international health corps, let me say that the reason that we used the Peace Corps as a parallel is because the Peace Corps takes expertise into countries and trains people in the communities to do their bidding for themselves.

One of the most exciting things that I've seen, of course, and it's a normal average example of what the Peace Corps has done, is when we were in Haiti, the GOBI--pardon my reference, I again accept the admonitions on GOBI—but the GOBI project there was something that was just sterling in terms of what the Peace Corps volunteers were doing. There was one young woman there who under very difficult and adverse circumstances had exhausted her term there, and was begging to stay because she had gotten so close to the community there, to teach more people, you know, about oral rehydration, breast feeding, and using growth charts, and advocating immunizations and so forth.

Anyway, both of you have been beautiful. I thank you very much for your testimony, and you will be hearing from us and we'll ask you to respond to other questions that we might have.

Mr. GERBER. Fine.

Ms. ROSENFIELD. Thank you.

Mr. GERBER. Thank you.

Chairman LELAND. Thank you. The committee is adjourned.

[Whereupon, at 1:13 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. TONY P. HALL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

GOOD MORNING. I WOULD LIKE TO WELCOME ALL OF YOU TO TODAY'S HEARING BEFORE THE SELECT COMMITTEE ON HUNGER. I CHAIR THE INTERNATIONAL TASK FORCE OF THIS COMMITTEE. TODAY WE WILL CONTINUE OUR EXAMINATION OF THE U.S. GOVERNMENT'S PROGRAMS WHICH PROMOTE CHILD SURVIVAL.

THERE IS NOTHING THE CONGRESS FUNDS IN FOREIGN ASSISTANCE THAT IS MORE IMPORTANT THAN HELPING MAKE THIS A WORLD FILLED WITH HEALTHIER, HAPPIER CHILDREN. DUE TO THE FINE EFFORTS OF UNICEF, THE AGENCY FOR INTERNATIONAL DEVELOPMENT, PRIVATE VOLUNTARY ORGANIZATIONS SUCH AS CARE, WORLD VISION, AND AMREF, THE WORLD HEALTH ORGANIZATION, HOST COUNTRY GOVERNMENTS, AND MANY, MANY OTHER GROUPS THERE ARE 2 MILLION CHILDREN ALIVE TODAY WHO OTHERWISE WOULD HAVE DIED LAST YEAR.

EXTENDING IMMUNIZATION PROGRAMS IS, BY ITSELF, SAVING OVER 1 MILLION CHILDREN EACH YEAR. AND THE USE OF ORAL REHYDRATION SALTS SAVES PERHAPS HALF A MILLION CHILDREN PER YEAR. THIS IS THE GOOD NEWS -- AND IT IS EXTREMELY POSITIVE.

THERE IS BAD NEWS, TOO, AND WE CANNOT FORGET IT, EVEN AS WE POINT TO THE VERY REAL SUCCESSES ALREADY ATTAINED. 10 MILLION CHILDREN ARE STILL DYING UNNECESSARILY IN DEVELOPING COUNTRIES. THEIR LIVES COULD HAVE BEEN SAVED BY LOW-COST, HIGHLY EFFECTIVE INTERVENTION LIKE IMMUNIZATION AND DIARRHEA PREVENTION AND TREATMENT. THIS IS A

CONTINUING TRAGEDY IN OUR WORLD, AND WE MUST NOT REST UNTIL ALL THE WORLD'S CHILDREN ARE GIVEN THE CHANCE TO LEAD LONG, FULFILLING LIVES.

OUR GOAL IS CLEAR: 0 UNNECESSARY CHILD DEATHS. OUR METHODS ARE SOUND, AND I CONGRATULATE UNICEF AND THE AGENCY FOR INTERNATIONAL DEVELOPMENT FOR THEIR ONGOING COLLABORATION TO SAVE CHILDREN'S LIVES.

UNFORTUNATELY, THERE IS MORE BAD NEWS. THE EXECUTIVE BRANCH IS PROPOSING TO BEGIN REDUCING OUR COMMITMENTS TO THESE CRITICAL PROGRAMS.

THREE AREAS, IN PARTICULAR, ARE FACING DEEP CUTS: OUR CONTRIBUTION TO UNICEF, AND AID'S BILATERAL PROGRAMS IN SUB-SAHARAN AFRICA AND CENTRAL AMERICA.

- THE CUT FOR UNICEF IS DEEPEST: FROM NEARLY $55 MILLION THIS YEAR TO A REQUEST OF ONLY $32 MILLION FOR FY 1989.
- THE CUT IN AFRICA IS ALSO SEVERE: FROM NEARLY $37 MILLION IN 1987 TO A PROJECTED $25 MILLION IN FY 1988. THIS CUT OCCURS AT A TIME WHEN THE NEEDS OF AFRICA'S CHILDREN AND MOTHERS HAVE NEVER BEEN GREATER, AND WHEN THE CONGRESS HAS VOTED LARGE INCREASES IN U.S. ASSISTANCE TO THAT CONTINENT.
- THE CUT IN ANOTHER TROUBLED REGION, CENTRAL AMERICA, WOULD REDUCE BILATERAL PROGRAMS IN CHILD SURVIVAL FROM $25 MILLION IN 1987 TO LESS THAN $20 MILLION IN 1988.

I HOPE THAT THERE IS STILL TIME TO CHANGE THE 1988 ALLOCATIONS, PARTICULARLY FOR AFRICA, AND I LOOK FORWARD TO ANY ENCOURAGING WORDS OUR ADMINISTRATION WITNESS MAY HAVE ON THIS. I WOULD LIKE TO SEE THE AFRICA LEVEL OF CHILD SURVIVAL PROGRAMS AT MORE THAN $50 MILLION IN 1988, WITH TOTAL BILATERAL ASSISTANCE FOR CHILD SURVIVAL AT OR ABOVE $200 MILLION -- ALSO IN 1988. IS THIS TOO MUCH TO ASK IN A WORLD WHERE 10 MILLION CHILDREN DIE UNNECESSARILY EACH AND EVERY YEAR?

I believe it is our duty to save as many children as we can as fast as is humanly possible. To do any less is to deprive these human beings of a chance. Should we live lives of quiet satisfaction while millions of children die of diarrhea at exactly the same time? Every three seconds a child dies. Every three seconds. Maybe we should pause for three seconds -- at least -- and think about that.

I am pleased to be able to say that the Select Committee on Hunger and its International Task Force, which I chair, has played a part in efforts to help children survive -- and thrive. We have always supported these programs, and will continue to urge the Congress to allocate the maximum amount of our foreign assistance to save children's lives. We are troubled by any sign of lowered commitment or enthusiasm to these programs for one simple reason: nothing we do is more valuable. Thank you.

We are joined by distinguished witnesses from the Agency for International Development, UNICEF, the World Health Organization, an important private development organization, the African Medical and Research Foundation, and the Carnegie Corporation of New York. We are very glad to have you here, and we look forward to your statements.

PREPARED STATEMENT OF HON. BILL EMERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

I am pleased that the Hunger Committee is once again holding a hearing on the important subject of child survival. Of all the humanitarian projects this committee could support, surely saving the lives of children is the most worthy.

As the recent AID report on child survival makes clear, there is a tremendous need for improving the survival rate of infants and children. In some parts of the world, one-quarter of all children do not live for more than five years. The biggest killers are diarrhea and measels, followed by whooping cough, diphtheria, tetanus, tuberculosis, and polio.

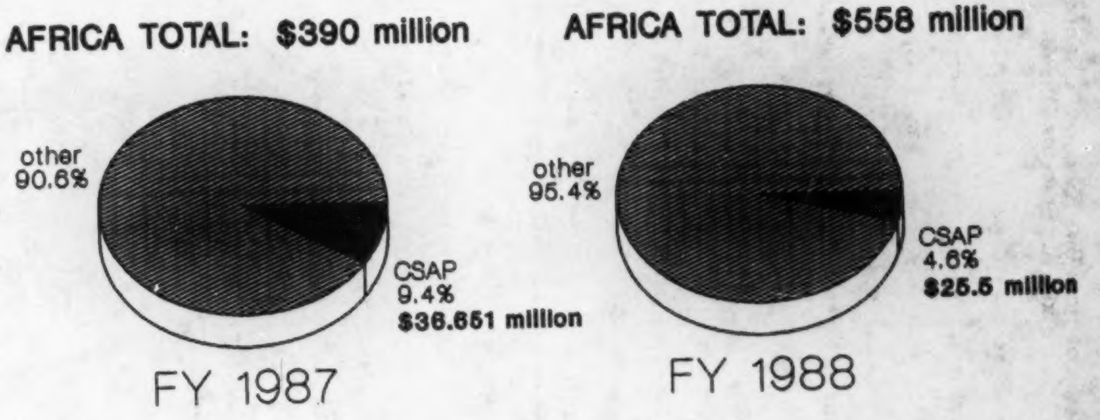
Child survival can be improved by some relatively simple means, but it takes time and money. Oral rehydration therapy is an effective treatment for diarrhea. Immunization is the most effective defense against many of the diseases that strike children.

AID's budget for this year specifically requests $66 million for child survival. Additional funds will come from other accounts. We will be interested in hearing from our witnesses their assessment of the need and how it can be best met.

Of all our foreign aid programs, child survival is certainly one of the most deserving.

AID $ for Child Survival in Africa: Major Reductions Proposed

Child Survival as % of AID's AFR Program

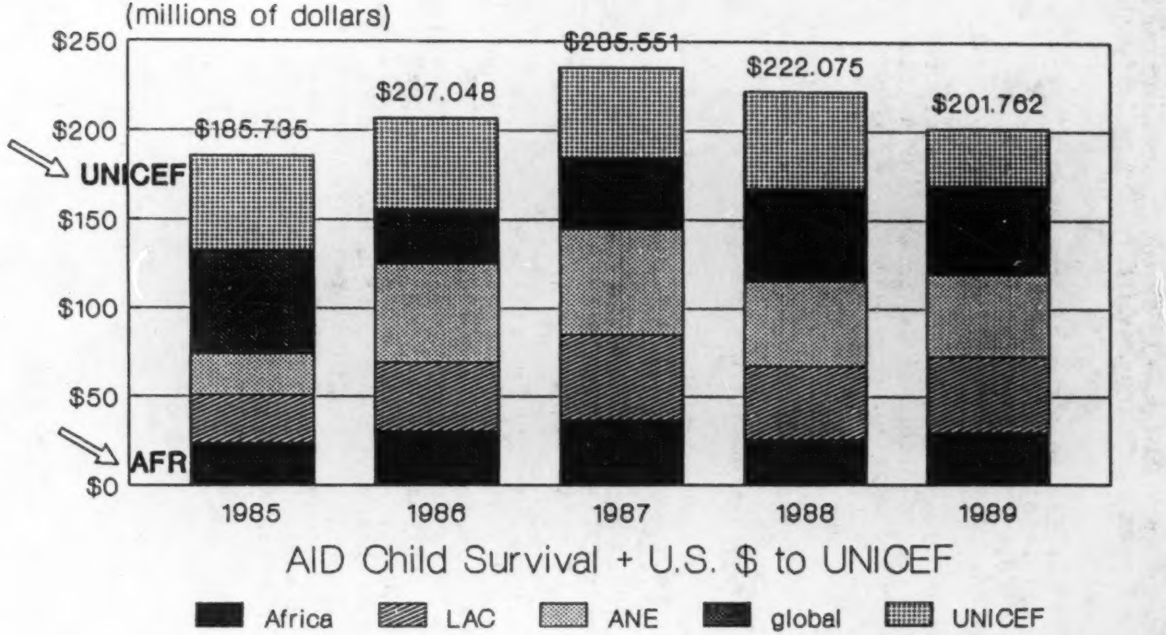


CSAP = Child Survival Action Program

Select Committee on Hunger

U.S. Government Child Survival Programs: A Flagging Effort?

(Bilateral and Multilateral Programs)



(1988 and 1989 Projections Based on Data from AID)

Select Committee on Hunger

PREPARED STATEMENT OF BRADSHAW LANGMAID, DEPUTY ASSISTANT ADMINISTRATOR, BUREAU FOR SCIENCE AND TECHNOLOGY, U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (U.S. A.I.D.)

This is the fourth time that the Agency for International Development (USAID) has had the opportunity to present testimony before this Committee. It is a pleasure for me to be here to reconfirm our commitment to child survival.

As you know, Ambassador Woods has recently returned from Talloires where he participated in the third international meeting on child survival. As usual, the discussions were candid and thoughtful. In his remarks, The Administrator reiterated the commitment of USAID saying:

> "We must remain committed to our focus in child survival - keeping it sharply on the world's children - and the best means keeping them alive and well.
>
> We need to stay committed to sustaining our child survival gains; and
>
> Finally, we must remain committed to developing new technologies and new and more effective mechanisms for delivering child survival services."

In Fiscal Year 1987, 75 million dollars were appropriated for the Child Survival Fund. Drawing on other accounts, the Agency more than doubled those dollars, committing 184 million dollars to child survival. This Fiscal Year (1988) the Congress appropriated 66 million dollars in the Child Survival Fund. The Agency expects to more than double those dollars again this fiscal year drawing in other accounts to fund child survival activities. In Fiscal Year 1989, the Agency is continuing its request for $66 million for the Child Survival Fund. Substantial amounts from other accounts will again augment the Child Survival Fund.

USAID's goal is to reduce global infant mortality to less than 75 per 1000. We are going to make this goal.

USAID's child survival strategy emphasizes ORT, immunization, nutrition and child spacing. Other interventions, such as measures against acute respiratory infection and malaria, are included in some situations.

According to the World Health Organization, the lives of as many as 1.5 million children were saved by the introduction of oral rehydration therapy (ORT) and immunization, the "twin engines" of USAID's child survival activities. Nearly 60 percent of children worldwide now have access to ORT, and the lives of an estimated 500,000 children are being saved annually, thanks to this simple, cost-effective technology.

Five years ago less than 25 percent of Third World children were protected from vaccine-preventable diseases. Today, WHO estimates that one of every two children has received at least one immunization. In many countries as many 80% of children are immunized.

In achieving this progress we have had a lot of help and many cooperators. I know of this committee's special interest in private voluntary organizations (PVOs). They play a valuable role in our child survival program. In Fiscal Year 1987, USAID contributed nearly 27 million dollars to support the child survival activities of U.S. PVOs through a centrally funded competitive grants program, grants for Vitamin A activities, and through other grants to such groups as CARE, Save the Children Federation, PATH and Rotary International. From the Child Survival Fund, 15 million dollars, more than 20 percent, went to U.S. PVOs.

The report on child survival that the Agency submitted to the Congress last week details some of the many contributions that these voluntary agencies are making in child survival programs around the world. The Agency is committed to exceeding 25 million dollars in grants for the child survival activities of U.S. PVOs in Fiscal Year 1988. In addition, we will continue to provide support for local private voluntary organizations.

During 1987, USAID expanded its ability to call on experts from outside the Agency to assist in international child survival programs. The US Centers for Disease Control have been providing advisors for immunization and ORT programs in Africa for several years under an agreement with USAID's Africa

Bureau. The new Child Survival Fellows program, implemented by the Johns Hopkins University, has placed 14 professionals in technical positions around the world. USAID's long-standing cooperation with Peace Corps continues. In addition, thanks to special congressional authority, USAID is now able to call on the Public Health Service, state government and U.S. universities to place badly needed technical advisors in child survival programs around the world.

USAID's child survival program places special emphasis on 22 of the largest, most impoverished developing countries. These countries contain 63 percent of all children in the developing world outside China; clearly, if we can reach our child survival targets in these countries, we will have made an extraordinary impact on the lives and prospects of the vast majority of the world's poorest populations.

Equally clearly, not all of these countries will be able to meet child survival targets by 1990. That they won't is evidence of the depth of their poverty, the lack of basic infrastructure, the fact that growth of services tends to lag behind growth in population, and the tragic ability of war and natural disaster to undo hard won gains. We are committed to stay the course--to get the job done.

Control of Diarrheal Diseases

USAID continues to lead the way in promoting ORT through projects that strengthen planning, local production and social marketing. By the end of 1987 more than 100 countries had begun national ORT programs. USAID provides support of one kind or another to one half of these programs. And, according to WHO, ORT is saving half a million children a year.

As the nutrition implications of repeated and prolonged bouts of diarrhea become ever more clear, the critical importance of improving feeding practices during and after illness has received increased attention. It is now well established that diarrhea, especially at weaning time, is a principal cause of malnutition in Third World children. Malnutrition, in turn, is associated with more frequent and more severe infection.

USAID continues to provide important assistance to developing countries as they institutionalize ORT efforts. Between 1984 and 1987 technical assistance from a centrally-funded project called PRITECH (Technology for Primary

Health Care) helped sixteen national diarrheal diseases control programs get under way, in addition to a Central American regional diarrheal disease control initiative. With loans and assistance from Project SUPPORT, private companies in Ghana, Paraguay, and Guatamala will be manufacturing ORS locally.

HEALTHCOM, another USAID-supported activity, is helping local producers to market ORS and is placing communications advisors in a number of countries to help promote ORT and other child survival interventions.

In Bolivia, a bilateral project with CARITAS, Bolivia, PRITECH and Catholic Relief Services is helping 1800 CARITAS Mothers' Club promoters by training them in ORT and growth monitoring. The project also distributes ORS and promotes ORT through local radio broadcasts and training groups.

Infant mortality has declined dramatically in Egypt. There is every reason to believe that measures to control diarrheal disease and, especially, the promotion of ORT, has brought about much of this decline. USAID has been supporting the Egyptain Government's National Control of Diarrheal Diseases Program since 1981. The project has trained over 5,000 health workers in ORT, purchased over 30 million ORS packets in 1987 and sold 24 million ORS packets through private pharmacies and other outlets.

Vaccine-preventable Diseases

Over one-quarter of USAID's child survival dollars are now devoted to immunization, and USAID currently supports long-term immunization activities in 48 countries. For the past two years, the Agency has been providing technical assistance to over 30 countries to help design and carry out immunization projects through a centrally-funded project known as REACH (Resources for Child Health).

Bilateral efforts to support immunization programs include collaboration with the Ministry of Health in Honduras that has resulted in a cold chain for vaccines that consistently functions in more than 70 percent of the rural health posts. The USAID mission in the Philippines finances a long-term consultant to the government's Department of Health and supports publication of an immunization newsletters that reaches 18,000 people

PVOs are also expanding their efforts in vaccine-preventable diseases. In Fiscal Year 1987, USAID committed $6 million to Rotary's $120 million worldwide PolioPlus vaccination campaign. On a smaller, but no less important scale, in an area of Indonesia where 20% of children die from neonatal tetanus, Project Concern International is helping the Ministry of Health to train village health workers to motivate women to take a complete series of tetanus vaccinations.

Coverage increases are being reflected in lower reported rates of disease. For example, polio cases in Latin America just ten years ago numbered between four and six thousand; now they number in the hundreds. Measles vaccination coverage has reportedly increased from 13 to 45% worldwide since 1984. The number of measles cases in the Congo appears to have dropped from over 10,000 in 1984 to an estimated 6,000 in 1986. Measles immunization seems to have reduced mortality among the under threes in Zaire by as much as 60%, and by 40% in Bangladeshi children under four.

Recognizing the complexity of mounting a successful immunization effort, the regional Africa Child Survival Initiative-CCCD has made advisors from the Centers for Disease Contol available to 13 African countries in order to strengthen program management and logistics, develop training modules, improve sterilization techniques, learn survey methodologies, etc. The REACH project has also assisted by the placement of long-term advisors in a number of other developing countries.

But a great deal remains to be done. Currently one-quarter of all vaccine preventable deaths are due to tetanus infection in the newborn, and tetanus coverage rates for pregnant women have been universally low, averaging 15% globally compared to 45-55% for other diseases.

Improved Nutrition

USAID's strategy for helping to improve child nutrition begins with the promotion of breastfeeding and better weaning practices. There are breastfeeding activities supported through child survival programs in 36 countries.

USAID is supporting the Wellstart training program in lactation management in nine developing countries and the PROALMA II project in Honduras. Both of these projects are helping to reverse hospital practices that discourage mothers from breastfeeding their newborns. Many projects, especially those of PVOs, include child nutrition as part of more comprehensive primary health care or child survival programs. In Kenya, the Salvation Army World Service Office has trained some 200 women health workers to visit mothers in their homes and counsel them on breastfeeding, family planning, immunization and ORT.

Children are most at risk of both infection and malnutrition during the crucial transition from breastfeeding to solid foods. Under a new Weaning Project, USAID is supporting an assessment of practices in four countries, after which countries will mount social marketing activities to demonstrate the possibilities of improving the ways in which children are fed. The demonstration program in Indonesia is just starting, and the one in Cameroon is being integrated into CARE's new child survival program.

USAID is also directing support towards deficiencies in key nutrients such as Vitamin A and iron. PVOs, including Helen Keller International and the International Eye Foundation, have been particularly active in promoting the awareness of Vitamin A's importance, providing training and distributing capsules. Efforts to address this important problem include those of Save the Children Federation, which are encouraging families to grow Vitamin-A rich foods in home gardens, and Helen Keller International which have helped with the fortification of MSG with Vitamin A in Indonesia.

Birth Spacing for Child Survival

Forty to fifty percent of all infant mortality occurs in the first month of life, particularly among underweight babies born to mothers weakened by infection and malnutrition. Increasing the birth interval to at least two years alone could cut infant and child mortality rates by as much as 20 percent.

USAID promotes child spacing though two major interventions: the promotion of breastfeeding and the provision of a full range of voluntary family planning services. In Haiti, for example, the Mobilizing Mothers for Child Survival project has trained women to provide child spacing counselling and services to mothers in the postpartum period. The African Medical and Research Foundation (AMREF) has sponsored workshops for traditional midwives and health workers that provide training in child spacing alongside other child survival interventions.

Research for Child Survival.

New technologies are needed to expand and improve child survival initiatives. Some of these needs are urgent if we are to achieve our goals. Research must remain a priority. The most urgent needs are:

A single dose and more stable vaccines that can be used more easily in developing country settings;

Vaccines against bacterial pneumonia and malaria;

A DPT vaccine without the side effects that discourage mothers from completing the series;

A super-ORS that not only rehydrates but also reduces the loss of fluids and nutrients; and

A nonreusable syringe to ensure the safety of immunization programs.

Progress is being made in all these areas.

Sustainability of Child Survival Activities

As good as the news is on the success of child survival efforts, we will make little lasting contribution to the children and families of the developing world if program coverage declines the moment attention is redirected to other problem areas.

The very success of child survival poses a special challenge. Countries and programs around the world have been functioning at almost unprecedented levels of performance and intensity. They have mobilized the media, the military, and volunteers in thousands of communities. Hundreds and thousands of people have been a part of this global effort.

Sustaining such a special level of performance will not be possible unless we build the infrastructure and systems to continue the effort. If we want to ensure the survival of children who suffer from dehydration, it is not enough simply to provide oral rehydration salts. The capacity to produce the salts, deliver them to those who have need, and educate families on their proper use must be transferred as well.. These must be incorporated into the practices of public and private health delivery systems, doctors and other medical providers and finally, families which bear the ultimate responsibility for child care. This requires time, patience, and commitment.

As is true with any program, financial questions loom large. Most child survival programs have been accelerated with external resources, sometimes by large infusions of donor assistance. To continue these programs, host governments and local institutions will need to assume increasing financial and programmatic responsibility.

Donors bear a responsibility too in helping programs make the transition from reliance on external support. Child survival programs can be jeopardized if donor contributions have not been well coordinated or if donors reduce support at the same time. This happened with malaria programs in the 1960's. The close and constructive collaboration evident in the series of meetings that have become known as Bellagio I, II and III suggest that we will not make the same mistake with child survival.

Child survival programs also need creativity and a willingness to experiment with:

-- Users fees, to generate revenues for preventive and curative services;

-- Resource reallocation, to reflect a higher priority for preventive child survival measures;

-- Revolving funds and other programs, to reduce costs and subsidize services through the sale of essential drugs or services; and

-- Private service providers and health insurance, to place more emphasis on child survival in their medical services.

Financial concerns are only part of sustainability. Changes become permanent when a broad segment of society values and benefits from them. That is why we work so hard to ensure that the people who need to be involved in creating change are actually involved.

Creating and sustaining demand for services is therefore essential. We know that families around the world want a decent life for themselves and a better life for their children. Child survival programs are making extremely creative use of print and broadcast media and other communication channels to focus on those simple measures that can make a difference in the lives of so many children. We have only begun to tap the contribution which new communications technologies can make. They can reach the family directly. They may play the determining role in the health decisions which families make in the case of their children. Child survival programs must enable families to make the best choice for the health of their children.

Finally, national commitment is perhaps the single most important factor in ensuring the continuation of programs. Where national commitment to child survival is strong, programs will be sustained.

Conclusion

It is remarkable to think of how much can be accomplished with concerted action and clear goals.

In the 1970s smallpox was eradicated in an unprecedented global effort. The 1990s will see similar successes. Polio can be eradicated at least from the western hemisphere, and perhaps worldwide, by the year 2000. Most of the world's children can be vaccinated. They can have access to oral rehydration therapy.

Our collective efforts can change the patterns of disease in many developing countries. We are committed to this course.

U.S. CONTRIBUTION TO UNICEF

UNICEF is an acknowledged leader in the field of child survival and development and is well respected in developing countries because of the effectiveness of its programs. The Administration, in recognition of UNICEF's superior performance in the delivery of humanitarian development assistance programs, requested $32 million for UNICEF for FY-1989, which is $2 million more than its FY-1988 request. In fact, the Administration's requests for UNICEF during the last few years have varied little, remaining in the $30-$35 million range.

The Administration does not intend to underfund UNICEF. Circumstances dictate, however, that difficult budgetary decisions be made to meet the increasingly severe demands for fiscal austerity. All international organizations, including UNICEF, have been affected by the serious budgetary constraints facing the U.S. Government. The $32 million UNICEF request maintains the U.S. as one of UNICEF's largest donors and attests to our unflagging commitment to support UNICEF's work.

It should also be noted for the record that the U.S. Agency for International Development (A.I.D.) contributes to individual UNICEF projects which are not accounted for in the U.S. voluntary contributions. For instance, in 1987 A.I.D. contributed approximately $10 million to special UNICEF projects, for a total U.S. contribution in 1987 of $61 million. This year, A.I.D. recently signed a $25.5 million grant for a UNICEF program in India.

FUNDING FOR CHILD SURVIVAL IN CENTRAL AMERICA

Central America (including Belize) Development Assistance child survival funding proposed in fiscal year 1988 is $9.8 million and $8.7 million in 1989; the Caribbean levels are $1.5 million in fiscal year 1988 and $2.9 million in 1989. In Central America (including Belize), the child survival funding levels for fiscal years 1987, 1988 and 1989 are $37 million, $13.4 million, and $10.9 million respectively. These figures include all accounts, that is child survival, health account funds attributable to Child Survival Fund accounts, the ESF supplemental for fiscal year 1987 and ARDN for Vitamin A activities.

REHABILITATION IN EL SALVADOR

According to information provided by the Latin America and Caribbean Bureau, the A.I.D. Mission in El Salvador has developed a $3.3 million strategy to strengthen the Salvadoran public-private capacity to provide rehabilitation services. This strategy includes a medical referral program to send complicated amputee cases to the United States for free medical treatment, an emergency fitting program for fitting up to 600 amputees with temporary lower limb prosthetic devices, and the development of a cost-effective in-country prosthetics workshop capable of meeting the demand in the civilian sector. The program is currently an A.I.D. bilateral program which targets Salvadoran civilian amputees. In the future, when the needs of the Salvadoran amputee population have been met, it certainly would be feasible and it is anticipated that these types of services will be provided to other Central American civilian amputee populations using the Salvadoran rehabilitation institutional capacity.

VITAMIN A FORTIFICATION

There are several points that I would like to make:

All of the Title II blended foods (corn soy milk, instant corn soy milk, and wheat soy milk), which were specifically designed for young children, are fortified with a vitamin/mineral premix containing approximately 2,000 I.U. of Vitamin A per 100 grams. In addition, three commodities (bulgur, soy-fortified bulgur, and soy-fortified sorghum grits) were recently reformulated to include the vitamin/mineral premix, because these commodities tended to be used in countries with serious nutritional problems. USDA and A.I.D. are currently looking at the technical feasibility and cost implications of increasing the Vitamin A levels, even in these foods, recognizing the importance of this vitamin in the diets of young and malnourished children and pregnant and lactating women.

The second point is that one cannot really compare the Vitamin A content of NFDM with a commodity like CSM because these commodities are used and consumed in different ways by our target populations. Our nutritional advisors have recommended that NFDM be added in its dry form to traditionally prepared dishes to increase the protein content of the diet. Many young children would not receive 100 grams of NFDM a day but may receive 100 grams of CSM, particularly in on-site feeding programs. In fact, by programming the vitamin enriched fortified and blended foods as a replacement for NFDM, it may insure that the targetted population is actually receiving more of the Vitamin A in its diet.

It is important to remember that the guidance for developing Title II programs emphasizes that our foods are not supposed to provide 100 percent of any nutritional requirement but should be treated as a supplement to the locally available foods.

In countries where Vitamin A deficiencies are prevalent, A.I.D. is supporting a variety of interventions including needs assesssments, Vitamin A capsule distribution programs, and training and education programs in addition to providing food.

Responses to Questions for Bradshaw Langmaid

Questions Submitted by Hon. Mickey Leland

PROJECTED CHILD SURVIVAL EXPENDITURES

Mr. Leland:	Please provide the committee with details on projected child survival expenditures for FY 1988 and FY 1989.
Answer:	Child survival outlays are tracked on the basis of yearly obligations. We do not yet have detailed projections of child survival obligations for either FY 1988 or FY 1989, because the Agency draws on various accounts to fund its child survival program and obligations projections are not broken out by type of activity. We can, however, provide you with estimates of our projected obligations for child survival in FY 1988 and FY 1989. At the time of the hearing and in our Congressional Presentation, we were able only to report firmly on our planned obligations for the Child Survival Fund in FY 1988 and FY 1989. We have now had a chance to analyze the child survival components of projects funded from other functional accounts. We estimate that obligations for child survival activities from the various functional accounts (including the Child Survival Fund) will be at least $148 million in FY 1988 and $154 million in FY 1989. These are estimates, and we expect that there will be changes as program planning evolves. These estimates do not include

some activities that are still in the planning stage such as, for example, the special Child Relief Program for Nicaragua. Nor do they include other activities that complement our child survival program but are funded from other sources, such as the Population Account and Public Law 480.

CHILD SURVIVAL

Mr. Leland: Please explain why the percentage of Africa money spent on children was reduced for FY 88.

Answer: The level of Africa Bureau obligations for child survival planned for FY 1988 is $25.5 million. This may increase somewhat as missions complete their obligation plans for the fiscal year. The FY 1988 level represents an increase over FY 1985 ($22.8 million) and FY 1986 ($25.4 million). The FY 1988 level is lower than FY 1987 ($33.5 million), but the increase last year primarily reflected forward funding in a few countries. The decrease in FY 1988 does not impede the Bureau's implementation of child survival activities, and does not reflect any lesser commitment to these activities.

Missions in the child survival emphasis countries are completing or updating their child survival strategies at this time and are beginning to design new projects and activities which will begin in FY 1989. The planned obligation level for FY 1989 is $29.9 million.

CHILD SURVIVAL FUNDING THRU PVOS

Mr. Leland: You stated in your testimony that A.I.D. intends to provide more than $25 million to U.S. PVOs for child survival activities in 1988. How much of this amount will flow through the A.I.D. Office of Private and Voluntary Cooperation (PVC) and please provide project-by-project detail on how you plan to reach this amount in FY 1988.

Answer: In FY 1988 the Agency plans to exceed the $25 million level to support the child survival activities of U.S. PVOs. Much of these funds will be provided directly by USAID missions as part of child survival bilateral programs. Precise numbers are not yet available for these grants.

Of the total amount, the Bureau for Food for Peace and Voluntary Assistance (FVA) has authorized funding for seventeen PVO child survival projects totaling $9.6 million. FVA plans to obligate these funds within the next few months as detailed in the attached table.

Attachment

FY 1988 CHILD SURVIVAL FUNDING OF PVO's THRU FVA/PVC

PVO & Country	Amount ($000)
Project Concern International - Indonesia	1,253.8
Freedom From Hunger - Ecuador	440.0
Project Concern International - Bolivia	850.0
Save the Children Federation - Bangladesh	1,000.0
Foster Parent Plan International - Guatemala	425.0
Catholic Relief Services - Ecuador	250.0
Health Sciences Education Center - Guatemala	600.0
Health Sciences Education Center - Honduras	500.0
Adventist Development and Relief Agency - Haiti	200.0
World Vision Relief Organization - Bangladesh	184.2
World Vision Relief Organization - Nigeria	400.0
Save the Children Federation - Zimbabwe	612.0
Save the Children Federation - Mali	1,015.0
CARE - Indonesia	1,178.2
Minnesota International Health Volunteers - Kenya	400.0
LECHE League - Guatemala	144.4
LECHE League - Honduras	144.4
TOTAL	9,597.0 */

*/ In addition FVA/PVC has provided $2.9 million in FY 88 Child Survival funds to Rotary International in support of their Polio Plus program.

CHILD SURVIVAL

Mr. Leland: Will there be funding for U.S. PVOs for child survival programs from the new Africa Fund? Is the procedure established for applying for such funds?

Answer: Yes, the Development Fund for Africa (DFA) is funding PVO activities through USAID missions in Kenya, the Sudan, Zaire, Niger, and Mali. Also, USAID Niger may support a second PVO project contingent upon availability of funds late in this fiscal year. Probable total: about $3 million in FY 1988.

The procedures for applying for DFA funds are the same as those used in the Agency's general process of forward planning. This process normally consists of the grant application being made directly to local USAID missions. A mission may include such proposals within its annual budget submission which is submitted to Washington in May of each year for the second year forward (e.g., May of 1988 for FY 90).

A mission may fund activities somewhat more rapidly by changing its priorities and using funds allocated to it within a current year. Prospects for child survival grants necessarily vary according to the mission, based on country needs, regional child survival priorities and available funding.

CHILD SURVIVAL: BREASTFEEDING

Mr. Leland: Breastfeeding promotion is a priority under child survival, yet it appears to me that the Agency for International Development (A.I.D.) is not doing very much to promote this critical child and maternal health intervention. What is A.I.D.'s strategy for promoting breastfeeding, particularly in Latin America and the Caribbean?

Answer: More than 80 A.I.D. health, population, nutrition, and child survival projects in over 32 countries worldwide report a breastfeeding element. In most of these cases, breastfeeding is a small part of an integrated child survival program. One health account-funded and one food and nutrition account-funded grant are dedicated exclusively to breastfeeding; two other projects funded from the population account have significant specific breastfeeding subactivities.

In all regions, including Latin America and the Caribbean, A.I.D. resources specifically dedicated to breastfeeding focus on: 1) promotion of breastfeeding at the time of birth, and 2) research to clarify and strengthen the birth spacing role of breastfeeding. About $1.1 million was obligated in FY 1987 for these breastfeeding specific projects, and we expect to obligate $1.3 million to them in FY 1988 for such activities.

A.I.D. breastfeeding promotion activities are concentrated in rapidly growing urban areas where the problems of declines in breastfeeding are the most serious. These programs have been very effective to date, but cannot meet current demands for assistance.

A.I.D.-supported programs include breastfeeding promotion as part of health education during provision of other services. Lactating mothers are encouraged not to abandon breastfeeding prematurely and to wean children gradually to a nutritious diet. Oral rehydration therapy projects dedicate as much as 5% of their resources to such breastfeeding promotion.

A.I.D.'s regional strategy for breastfeeding promotion in Latin America and the Caribbean is based on country assessments of priority interventions to reduce infant mortality. A.I.D. missions in five of the six child survival emphasis countries of the region are in the process of developing country assessments and child survival strategies. The Ecuador assessment has been completed and shows that a high proportion of infant deaths occur in the neonatal period. Accordingly, child survival interventions such as breastfeeding, which are particularly important for the neonatal period are expected to be given high priority for the future in child survival activities in Ecuador.

Several projects in Latin America train medical personnel who provide services to mothers and newborns in local teaching hospitals, as well as in clinics and rural health posts at the time of delivery. Training concentrates on clinical management of pregnancy and lactation; design and implementation of optimal perinatal health services; and improved in-country education of doctors, nurses, and outreach workers.

SPECIAL HEALTH NEEDS OF CHILDREN AND MOTHERS

Mr. Leland: The initial legislation setting up the Child Survival Fund required that the Fund be used for "the special health needs of children and mothers." What is AID doing to promote "the special health needs . . . of mothers"? Specifically, the 1987 child survival report indicates a very small amount of money going for maternal health: Will this level be increased in FY 1988 or FY 1989?

Answer: Yes, this level will be increased in FY 1988.

There is a growing awareness of the magnitude of maternal health problems and the relationships of these problems to infant health, particularly during the first month of life. In FY 1988 A.I.D. will begin a major new five year, $15,000,000 interregional project, Maternal and Neonatal Health and Nutrition. This project will strengthen existing maternal and neonatal services of proven effectiveness, such as tetanus toxoid immunization of mothers and iron supplementation, and help develop and test new approaches to the delivery of maternal health services in five countries.

With the growing recognition of the importance of the health of the mother to the health of the infant, there is more emphasis on reaching women within existing child survival projects. Some projects focus on outreach - finding and following up on women most in need of prenatal and perinatal care; some on services directed to women, such as tetanus toxoid and voluntary family planning services; and others support research on better ways to reach and provide services for women.

A.I.D.'s family planning programs (under the population account) directly complements child survival programs and contributes to maternal health. Child spacing concepts are integrated into health, nutrition, education and population programs. High-priority activities include increasing public knowledge of the high risk associated with certain pregnancies and making contraceptives available while encouraging breastfeeding for birth spacing as well as for child health and nutrition.

MULTIVITAMIN SUPPLEMENTS IN CHILD SURVIVAL

Mr. Leland: Are multivitamin supplements included as a preventive health measure in the Agency for International Development's (A.I.D.'s) child survival strategy? Certain American manufacturers apparently are willing to donate these products on a trial basis. What is A.I.D.'s view of this?

Mr. Woods: Currently, multivitamin supplements are not included as a preventive health measure in A.I.D.'s child survival strategy. However, multivitamin supplements plus iron should be given during prenatal care and where multivitamin and iron deficiencies are indicated. Under A.I.D.'s new maternal and neonatal health and nutrition initiative in child survival, such multivitamin supplement donations could be considered after review of a country's resources and infrastructure to sustain distribution of the supplements.

Question Submitted by Hon. Elizabeth J. Patterson

FOUR INITIATIVES FOR CHILD SUPPORT

Ms. Patterson: It is my understanding that A.I.D. has four initiatives for child support. I would like to know if emphasis is placed on and money provided equally to all four. I am concerned that breastfeeding and serious family planning are not receiving enough attention.

Answer: A.I.D. places primary emphasis in its child survival programs on two interventions: immunization for childhood diseases and diarrheal disease control through oral rehydration therapy (ORT). Universally applied, these two interventions alone could avert as many as half of the infant and child deaths in A.I.D.-assisted countries. Just over one-half of child survival dollars go to support immunization and ORT programs

A.I.D.'s child survival strategy also includes a focused package of nutrition interventions, including breastfeeding, and support for child spacing. In addition, in some countries, acute respiratory infection, malaria and other activities are included in child survival programs. In FY 1987, approximately 14 percent of child survival dollars supported nutriton activities and 28 percent supported other child survival activities. Five percent of child survival dollars supported child spacing. This last portion - nearly $10 million - supported child spacing activities in some 30 countries.

In addition, A.I.D. has a very serious and substantial commitment to voluntary family planning and child spacing financed through A.I.D.'s population account. (In FY 1988 $197 million was budgeted for this account and the Administrator has requested $194.440 million for FY 1989.) These activities complement A.I.D.'s child survival program but are not, strictly speaking, part of it.

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21 March 1988

Dear Chairman Leland and Chairman Hall,

I very much regret that travel in Asia prevents my personally joining you at this annual overview hearing on child survival and development. There are few legislative bodies which have played as critical a role in advancing the Child Survival and Development Revolution (CSDR) as the House Select Committee on Hunger, and it has always been a pleasure for me to discuss our work with members of the Select Committee and to hear your ideas and concerns. While I have asked Dr. Carl Taylor to represent UNICEF at the hearing, I wanted to share some of my personal thoughts with you. I would be grateful if this letter and its attachments could be included in the record of your hearing.

Progress in child survival

When I first met with the Select Committee four years ago, I emphasized the new potential for achieving a major acceleration in child survival, drawing upon the untapped potential of combining social communications and primary health care techniques. I know that the Select Committee - and the entire Congress - share our satisfaction with the tremendous progress that has been achieved in these years, due largely to the nearly unprecedented international mobilization which has occurred. The first item I am attaching to this letter is a Summary of UNICEF's most recent State of the World's Children report, which highlights these developments and outlines the challenges remaining before us. The Report particularly describes the emerging "grand alliance for children" in which international organizations, bilateral aid agencies, national governments in developing countries, local and international voluntary organizations and a wide range of social institutions such as religious groups and village associations are uniting to work together for child survival.

The Honorable Mickey Leland
  Chairman, Select Committee on Hunger
The Honorable Tony Hall
  Chairman, International Task Force
United States House of Representatives
Washington, DC 20515

As The State of the World's Children, 1988 chronicles, the results of this grand alliance are most encouraging. Immunization rates have been increasing at an ever-more-rapid pace, to the point that the once-seemingly unreachable goal of universal child immunization by 1990 (UCI-1990) is now tantalizingly within our grasp - if we are able to sustain and still further accelerate the international mobilization for children. Similar potential breakthroughs are also within reach in activities such as the control of diarrhoeal disease through oral rehydration therapy (ORT), the control of acute respiratory infections, and a number of related child survival measures. The World Health Organization and UNICEF estimate that in 1987 alone, the improvement in the health of children as a result of the accelerated UCI and ORT programmes averted the deaths of more than two million children. If the 1990 goals now so close to being reached can be attained, the resulting reduction in child mortality rates will bring a saving of some 6 million child lives annually, and for reasons explained in the Report, an even greater reduction in births.

The Declaration of Talloires

One dramatic manifestation of this emerging Grand Alliance for Children has been the unprecedented level of collaboration and complementarity achieved among international organizations, bilateral agencies, developing country governments, and non-governmental organizations. This is best illustrated by the International Task Force on Child Survival (often known as the "Bellagio Group"), whose latest meeting was held earlier this month at Talloires, France. Participants included the executive leaders of the major international organizations involved in child survival (including Dr. Mahler of WHO, Mr. Conable of the World Bank, and myself for UNICEF), all of the leading bilateral aid agencies (including the U.S. Agency for International Development, represented by Administrator Woods), leading Ministers of Health from developing countries, and non-governmental organizations such as the Rockefeller Foundation and Rotary International.

The Talloires meeting sought to develop means for further accelerating our progress and identifying ambitious but achieveable goals for the remaining dozen years of this century. While the final text of the "Declaration of Talloires" has not yet been completed, I am attaching those points from our discussions which struck me as most significant. There was a clear consensus among these leaders and professional experts to commit themselves to achieving major breakthroughs in the 1990s, resulting in saving some 100 million children from death and life-long disabilities, slowing population growth, and, as a gift from the 20th century to the 21st, eliminating polio.

The Bamako Initiative

A fundamental tenet of this mobilization for child survival has been optimism twinned with sober assessment of the obstacles to be overcome. Nowhere do these dual considerations apply more than in Africa. As Members of the Select Committee are well aware, Africa has been plagued for too many years with declining per capita growth rates, high infant mortality rates and debt insolvency. Achieving the child survival revolution in Africa therefore requires special measures that ensure a close linkage between external funding and the mobilization of domestic resources. A major step in this direction was taken by the African Health Ministers at their meeting in Bamako, Mali in September 1987. That meeting launched the "Bamako Initiative" to bring maternal and child health services to virtualy all African families. My third attachment to this letter is a brief summary of the Bamako Initiative - an invitation from Africa's health leaders to external donors to join in a compact which would use a modest amount of external assistance to procure essential drugs, including vaccines, and combine these supplies with village-level self-help resources (through "community financing") in order to ensure the widespread availability of basic essential medicines, vaccines and health services to more than 80 per cent of Africa's mothers and children.

The Convention on the Rights of the Child

The past year has seen encouraging progress in the drafting of an international codification of the rights of children. A "first reading" of the draft text of the "Convention on the Rights of the Child" was completed this month, and reported to the United Nations Human Rights Commission. The U.N. General Assembly last fall urged that action on the drafting of this document for the survival, protection and development of the child be advanced so that it can be approved by the General Assembly during 1989, the tenth anniversary of the International Year of the Child.

United States leadership

Since the winter of 1982-83, when UNICEF first articulated the possibility of revolutionary progress for children, the United States Congress has led the world in encouraging acceleration and providing essential financial support to sustain momentum - to transform ideas into a human reality experienced by millions of children every day. Largely prompted by the House Select Committee on Hunger, the Congress was the first national parliament to endorse the CSDR; you have consistently insisted on a "fair share" United States contribution to UNICEF to enable us to fulfill our responsibilities; and you ensured a strong bilateral commitment to child survival activities through both the regular account allocations to USAID and the establishment of the Child Survival Fund.

I would hope that this year you will maintain your leadership - intellectually, politically and financially. I hope that you will look seriously at the opportunities for United States support to the Bamako Initiative. I hope that you will sustain the capacity of the Agency for International Development to contribute bilaterally to child survival activities through a strong Health Account and a Child Survival Fund disbursed through private voluntary organizations and international agencies. I hope that you will work to ensure that the United States contribution to UNICEF's General Resources will return to the fair-share level of 25 per cent of governmental contributions - a level briefly exceeded in 1984 and 1985, but which rapidly slipped to 19 per cent in 1987 and may be as low as 16 per cent for 1988, thanks to the steadily increasing contributions of many other governments. And I hope that you will encourage United States leadership in bringing the Convention on the Rights of the Child to a speedy reality.

United States leadership for child survival is manifest not only in acts of the Congress, but in the work of your bilateral assistance agency. I would like to take this opportunity to express UNICEF's profound respect for the leadership and diligence offered by the U.S. Agency for International Development, under the leadership for so many years of Peter McPherson, and for the past several months of Alan Woods. I should particularly mention that Mr. Woods impressed all of us at Talloires by his broad grasp of the issues of international development as well as the opportunities and challenges for accelerating child survival, and we look forward to our partnership with him and his colleagues.

Again, Messers. Chairmen, I express my regrets that I cannot be with you personally at the Select Committee's hearing. To comment further on our work and answer your questions, I have asked my Special Advisor, Dr. Taylor, to participate, assisted by Mr. Paul Altesman, one of my Special Assistants. In addition to previously serving as UNICEF's Representative in Beijing, Dr. Taylor is a well-known international expert in the field of public health; he was a moving force for public health in India and a major figure in the landmark Alma Ata Conference of 1978 which launched primary health care at the international level.

The Select Committee has contributed so much to the progress which has been made in so short a time for the survival and well-being of the world's children. The Canadian Public Health Association has called our common endeavours "a miracle in the making". If this miracle is indeed made, your Committee members will truly be among the miracle makers.

I thank you for your continuing support.

Sincerely yours,

James P Grant

James P. Grant
Executive Director

Attachments:

-- Summary of The State of the World's Children, 1988
-- Key observations of the 1988 Talloires meeting of the Task Force on Child Survival
-- Summary of The Bamako Initiative

(The above attachments retained in committee files.)

Response to Question for Dr. Carl Taylor

Question Submitted by Hon. Mickey Leland

Question:

Statistics obtained by the Committee suggest that 95 percent of children born to mothers who die in childbirth die themselves before their first birthday. And maternal mortality rates are getting worse in many parts of the developing world. What is UNICEF doing to promote maternal health in developing countries?

Answer:

Mr. Chairman, I believe your question addresses three issues; statistics on children born to mothers who die in childbirth, maternal mortality rates, and what UNICEF is doing to promote maternal health in developing countries. Therefore, I will answer it in three parts.

A. It is true that a large percentage of the children whose mothers die in childbirth die themselves before their first birthday. In exceptional circumstances this may reach 95 percent but usually UNICEF would estimate that well over 50 percent of children die under these circumstances. The major consideration is whether appropriate provision can be made to substitute for the breast feeding which is so critical to the survival fo babies in poor communities.

B. Maternal mortality rates are undoubtedly on the rise in war-torn nations such as Angola, Mozambique, Lebanon, and Afghanistan. But progress has been made. The developing region with the lowest maternal mortality rate is East Asia with a maternal death rate of about 45 per 100,000 live births. Others, less impressive, include; Southeast Asia with a maternal rate of about 430 per 100,000, South Asia 530 per 100,000, and Africa about 690 per 100,000. In the industrialized countries as a whole the maternal mortality rate is about 10 per 100,000. The differential between developing and industrialized countries in maternal mortality rates is higher than for any other social or economic indicator. I would like to submit to you a chart that appeared in the 1988 State of the World's Children report. It indicates the availability of health care to mothers and infants.
As you can see, care for pregnant mothers and children under one is now available to a majority of families in the developing world. The challenge now is to create a demand on the part of mothers for these services. Significant improvement in the state of the world's children depends most directly on the state of the world's mothers--on their physical well-being, on their available time and their energy, on their education and access to information and income, on their status and their morale.

C. To meet the needs of women, UNICEF gives considerable emphasis to programs for women and girls. Some specific activities supported in recent years include:

* UNICEF in Tanzania is formulating and advocating strategies to ease the work burden of pregnant women and promoting the closer monitoring of pregnancies by village health committees. Incidentally, this project is funded in part by the U.S. Committee for UNICEF, our American advocate and fundraiser.

* UNICEF in Egypt is mobilizing rural women leaders and day care teachers to deliver health services to mothers.

* UNICEF in Malawi is distributing tetanus toxoid and iron foliate to pregnant women.

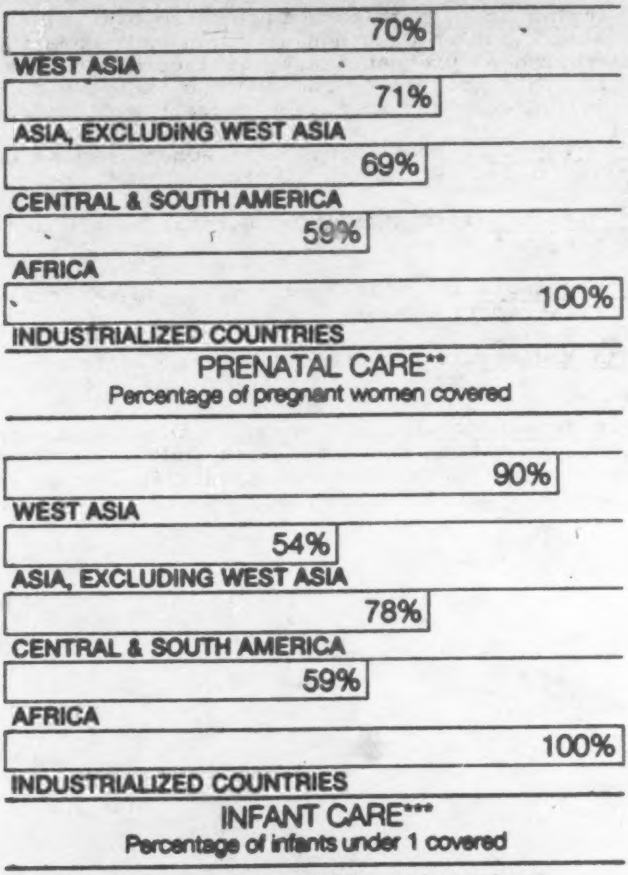
* UNICEF in Bolivia is publishing manuals on maternal health for use in the primary schools.

* UNICEF in Nigeria is supporting national workshops on women's health.

* UNICEF in Mozambique has six projects in drought-stricken areas of three provinces concerned with access of households to food, services, and income. Approximately 80,000 women and their families are benefitting from projects.

Thank you, Mr. Chairman.

Fig. 13 Availability of health care for pregnant women and infants, 1986*



PRENATAL CARE**
Percentage of pregnant women covered

INFANT CARE***
Percentage of infants under 1 covered

Care for pregnant mothers and children under one is now available to a majority of families in the developing world.

*Trained personnel available and can be reached in no more than one hour by the usual local means of transport (including walking).

** 101 countries, excluding China, Nigeria, and Bangladesh.

*** 72 countries, excluding China, Nigeria, Brazil, India, and Bangladesh.

Sources: Health care availability: World Health Organization.
1986 population: UN Population Division and UNICEF estimates.

PREPARED STATEMENT OF MICHAEL H. MERSON, M.D., DIRECTOR, DIARRHEAL DISEASES CONTROL, WORLD HEALTH ORGANIZATION (WHO)

I am the Director of the Diarrheal Disease Control Programme of the World Health Organization, a programme initiated in 1980 in response to a call from all the developing and developed countries for a concerted action against the diarrheal diseases - a condition which each year kills 5 million young children in the developing countries, accounts for one-fifth of all their malnutrition and afflicts every African child at least 25 times in his first 5 years of life. This programme, to which the United States of America is a major contributor, represents a truly global initiative to implement the relatively simple approaches that are available to treat and prevent these diseases and to undertake research to discover new tools to strengthen this effort.

The Programme's major strategy for reduction of diarrhea mortality is proper case management or treatment of cases. It comprises the prevention and treatment of dehydration (which accounts for 2/3 of diarrheal deaths), appropriate feeding of the child with diarrhea (to prevent malnutrition and chronic diarrhea which accounts for 25% of deaths) and selective use of antibiotics and intravenous fluid (to avoid the remaining deaths). Correct application of this strategy can dramatically reduce diarrhea mortality and associated malnutrition, as well as hospital costs for diarrhea treatment.

Because of its simplicity and low cost, this strategy is being given priority by the developing countries implementing diarrheal diseases programmes, which now cover 98% of the developing world population. And these programmes are achieving substantial progress, indeed considerably more than we predicated 7 years ago. For example:

1. in 1986, 60% of the population of the developing countries have access to the life-saving Oral Rehydration Salts (ORS) for treatment of dehydration; in 1980 access to these salts was essentially nil.

2. in 1986, 300 million packets of ORS were distributed worldwide, and 2/3 of them were produced in the developing countries themselves; in 1980, 40 million packets were available and production occurred in only 13 countries.

3. in 1986, one quarter of the more than 1 billion diarrheal

> cases in young children received ORS or another suitable fluid, compared to less than 1% of cases in 1980. Treatment on this scale may have averted three-quarters of a million diarrhea deaths in 1986, and could avert twice as many diarrhea deaths in 1989 and four times as many in 1995.

The Programme is also promoting four other strategies that can substantially reduce diarrhea morbidity for priority action in countries where diarrhea mortality has been already substantially reduced; namely, improved nutrition, use of safe water, good personal and domestic hygiene and measles immunization. Assuming the appropriate approaches can be found to implement the various components of these strategies, a 20% reduction in diarrhea incidence, i.e. prevention of more than one quarter of a billion cases, may be achievable by 1995.

I hope it is evident that this programme is having a substantial impact in saving lives and improving the quality of life of the world's children, and has the potential for having even a greater impact in the next decade. As important, national diarrheal diseases control programmes are strengthening the health infrastructure of many developing countries and thus will facilitate the introduction of other interventions for child survival, such as proper treatment of the acute respiratory infections which presently cause 4 million childhood deaths annually, 3 million of which cannot be prevented through immunization.

To achieve both of these goals, i.e. child' survival and strengthening of the health infrastructure, bilateral and international agencies must maintain their present commitment to child survival programmes for diarrheal disease control and immunization. In particular they must support those activities which will ensure the development of sustained programmes that will continue to have their impact beyond the year 2000. We have come far in our achievements, but still have the most difficult road ahead, i.e. reaching those with the poorest access to health care. But we can achieve our task if we work with the developing countries to strengthen their capability to implement programmes themselves.

The commitment made by the United States of America to diarrheal disease control and child survival is well-recognised and appreciated by the developing countries and other donors. They and we very much hope that this commitment will be a long-term one as the lives of some many still unborn children depend on it.

PREPARED STATEMENT OF MICHAEL S. GERBER, PRESIDENT, AFRICAN MEDICAL AND RESEARCH FOUNDATION, AMREF/USA

On behalf of AMREF's staff and Board of Directors, I would like to express our appreciation for this opportunity to testify before the Select Committee on Hunger and share our Child Survival experiences with you. During the course of this presentation, I would like to comment on four specific areas. It would probably be helpful to begin with a brief background statement on AMREF and our programs. I will then review AMREF's 28 year involvement with child survival (or as we prefer to say, child health) activities prior to receiving a USAID Child Survival grant in 1986. Thirdly, a number of issues will be highlighted which have proven crucial to AMREF's child health efforts in East Africa. I will conclude with a few comments on AMREF's specific relationship with USAID relative to our centrally funded Child Survival Grant. Please bear in mind that my comments and observations must be taken in the context of AMREF's geographical experiences, namely eastern and southern Africa. With regard to USAID funded Child Survival programs, that context is specifically Kenya.

BACKGROUND: AMREF is a private voluntary organization that was founded in the United States in 1957. With its field headquarters in Nairobi, Kenya, AMREF has been working for over thirty years to improve the health of the rural people in East Africa. AMREF's field staff numbers more than 600, of which 93% are African. Over 40 distinct projects are being carried out in the areas of public health, health training, clinical services, research, and health learning materials development. AMREF currently has projects in Kenya, Uganda, Sudan, Somalia and Tanzania. In the past, activities have been undertaken in Ethiopia, Zambia, Zimbabwe, Botswana, Lesotho, Malawi, and Zanzibar.

Funding is generated from both the private and public sectors. Besides USAID, many other government and international donor agencies provide support. These include the governments of Kenya, Tanzania, the Netherlands, Germany, Sweden, Canada, Denmark, United Kingdom, Norway, UNICEF, UNDP, World Bank, and the European Economic Community. AMREF is the only non-sectarian, Non-Governmental Organization (NGO) that receives direct cash grants annually from the Ministries of Health in Kenya and Tanzania.

Private sector support comes from major foundations such as

Carnegie, Ford, Pew, and William Penn, from corporations, and from the general public.

One important factor which distinguishes AMREF from other PVOs is its firm roots in the field. Rather than develop a large institutional base in New York, AMREF established its technical support capabilities in East Africa. This has resulted in AMREF being viewed by governments, UN agencies, and NGOs as a non-political, regional organization. It is a position which permits and encourages collaboration and communication across national boundaries.

AMREF feels that its success in carrying out rural health programs can be attributed not only to its regional presence in East Africa but also to the following: insistence on being involved in the design stage of any project it will later help implement; working closely with Ministries of Health and other agencies; remaining flexible and low-cost in approach; advocating a balanced rural health program incorporating clinical services with community health training and preventive health; utilizing modern communication and light aircraft to serve remote areas of East Africa.

AMREF is organized into five departments: Community Health, Clinical Services, Training, Health Behavior and Education, and Health Planning. There are special units for Evaluation and Operations Research, Family Planning, Nutrition, Environmental Health Support, Continuing Education, Malaria, Health Learning Materials, Distance Teaching and Teacher Training. Projects and consultancies which require work of staff from several departments and units can draw upon the full range of technical, administrative and financial resources within AMREF.

CHILD HEALTH ACTIVITIES - 1957 TO 1988: AMREF has been working to improve the health status of mothers and children in East Africa for 31 years. Mobile medical teams have been delivering health services to nomadic groups in Kenya and Uganda. These services have been provided to the Masai, Turkana, and Karamojang peoples. AMREF's mobile programs have emphasized child immunizations, antenatal care for expectant mothers, and health education. Over this period, close to 2 million inoculations have been administered for measles, polio, tetanus, and other childhood diseases.

With funding from the Canadian Public Health Association in

1987, AMREF began assisting the Ministry of Health in Tanzania to carry out a large scale child health program. Focusing on Rukwa Region in the southwest, AMREF is attempting to reduce the highest infant mortality rate in all of Tanzania (200/1000). Immunization and other activities are being carried out as part of a community based health care plan.

Supported by a grant from USAID in 1983, AMREF established a Family Health Department. With responsibility for family planning, MCH, and nutrition activities, this department has conducted a number of child health projects including the training of traditional birth attendants (TBAs) and shopkeepers as family planning advocates, and a private sector family planning program in Kenya. This department was in place when AMREF received its Child Survival Grant from AID in 1986 and is responsible for implementing the grant objectives in specific slum areas of Nairobi (see below).

After serious drought in East Africa during the early 1980's, AMREF established a Nutrition Rehabilitation Unit for mothers and children in the Kibwezi District of Kenya. With support from the William Penn Foundation, nutrition rehabilitation for mothers and children was made an integral part of AMREF's Kibwezi Community Based Health Care Scheme which is being carried out in cooperation with the Ministry of Health. USAID's Child Survival Grant was later incorporated into the Kibwezi program (also described below).

These few examples are illustrative of AMREF's commitment to and previous experience with child health interventions.

FACTORS FOR SUCCESSFUL IMPLEMENTATION OF CHILD HEALTH PROJECTS: From AMREF's vantage point, it appears that a number of factors need to either be considered or to be already in place before there can be a successful start-up and implemenation of USAID's Child Survival program strategies. These include: (1) prior experience with immunization and other child health related activities; (2) the linking of PVO activities with national level EPI programs such as the Kenya Expanded Program on Immunization; (3) the need to concentrate on interventions for mothers as well as children; (4) the ability to integrate child health projects into broader community based health care schemes.

Since I have already described AMREF's varied experiences with child health projects, there is no need to review them again.

However, we strongly feel that such prior involvements are crucial to the implementation of projects funded through USAID's Child Survival programs. The implementation of immunization activities for PVOs or any type of organization is difficult if a programmatic infrastructure does not already exist. I believe AID's experiences with Child Survival Projects in East Africa will attest to the difficulties of getting such projects started. In a number of cases, there have been delays. In AMREF's situation, delays were minimized. We had, for example, been doing immunizations for nearly 30 years. The USAID Child Survival Grant allowed us to carry on in an expanded manner with things we already knew how to do.

With the support of UNICEF, WHO, and other international donors, many African governments have been trying to implement national child health programs. Foremost are the Expanded Programs on Immunization. One of AMREF's highest priorities has always been to work closely with governments to strengthen their capabilities for providing health services to rural or other underserved populations. Our USAID funded Child Survival activities are closely coordinated with the central Kenyan Ministry of Health, the MOH's district medical teams in Kibwezi and Masailand, and the City Council of Nairobi. AMREF's child health efforts have concentrated on the underserved areas that cannot be reached by government because of lack of resources. PVOs in particular have the capabilities and access to work in remote areas. They must avoid any tendencies to function in isolation of government and/or other private agencies. It is essential that all efforts be closely coordinated with Ministries of Health, at both district and national levels. This is the only way to ensure that scarce funds are put to maximum use.

There is a crucial need for child health interventions to target mothers and children. USAID Child survival projects should really have a "family health" focus. There has been criticism that in maternal and child health programs, the 'M' in MCH is be being left out. At times, the concern for maternal mortality does not seem to be as significant as that for infant and child mortality. AMREF's interest in women's health is evident in our approaches to antenatal clinics, tetanus injections, family planning efforts, and nutrition projects.

In conjunction with all immunzation efforts, antenatal clinics are held and the "Road to Health" growth chart has been adapted to include an expectant mother's history. We are investigating the utilization of a one-shot, self-destructing injector capsule for tetanus toxoid and hope to train community health workers and TBAs as inoculators. Given Kenya's growth rate of over 3% per annum and a fertility rate of nearly 8 children per woman, emphasis on family planning is crucial to improving the health status of women. I have already mentioned that as a health agency, we are committed to family planning as an integral part of all child health projects. Just as crucial to the improvement of women's health is the need to improve nutrition - especially during childhood and the child bearing years. An investment in improved nutrition for women will pay dividends in the improved health status of children. AMREF's nutrition rehabilitation efforts have been noted above.

Our experiences in East Africa have shown that child health applications are most effective when integrated with government programs and integrated into comprehensive community based health care schemes. AMREF has effected both types of integration with its USAID funded Child Survival Grant.

The three target coverage areas for AMREF's Child Survival project in Kenya are Kibwezi, Masailand, and two slum neighborhoods of Nairobi. AMREF, in collaboration with the Ministry of Health, has been developing a community based health care program in Kibwezi since 1978. Kibwezi is an area of approximately 150,000 people, many who migrated there from other parts of Kenya in the last 20 years. Before AMREF's involvement, few health services were available. Components of the Kibwezi program include the development of a health center to serve as focal point for district services, training of 200 community selected village health care workers, water development, and nutrition rehabilitation. With USAID funding, immunization, ORT, and family planning activities were incorporated into already existing structures. Specific activities under the Child Survival grant were able to benefit from strong linkages to the village communities and the Ministry. It became relatively easy to expand the health center's work to include immunizations and ORT.

In Masailand, AMREF's mobile team and nomadic health unit spent years developing relationships with the Government's district health teams, community groups, school teachers, and Catholic and Protestant mission health facilities. It was therefore possible to fold into this existing framework an increased immunization and MCH capability provided by USAID's Child Survival Grant.

AMREF utilized the community based model developed in Kibwezi and elsewhere to develop its child health approaches in the Soweto and Lunga-Lunga slum areas of Nairobi. Working with the Nairobi City Commission and local NGOs, community sensitization necessary for community based health care was given high priority. After developing a community foundation, it then became possible to undertake community based health care which includes such child health interventions as growth monitoring, nutrition, family planning, antenatal care, and the training of trainers.

AMREF AND USAID: I would like to conclude with a few remarks about USAID's centrally funded Child Survival program, and more specifically about the process by which the grants are awarded. To some extent, these comments are reflective of AMREF's experiences with other AID centrally funded grant programs as well.

Stated in this presentation are a number of criteria which AMREF feels essential to successful undertaking of child health projects. Included in these are a proven track record in child health interventions, linkages to national level programs, and an ability to integrate child health strategies into community based health care schemes. We feel that these are the criteria upon which USAID should be making a determination as to which projects to fund. Our experience with AID/Washington has, at times, proven otherwise.

AMREF submitted three Child Survival proposals to the PVC office, in 1985, 1986, and 1987. Our track record for nearly 30 years remained the same for all three submissions, with a proven capability in certain areas and some weaknesses in others. In all three proposals, the AMREF project was given a highest priority rating by the Kenya/USAID Mission. Our understanding was that the Mission rated AMREF's proposals highest for two reasons - the priority needs of Kenya with regard to child health and AMREF's ability to carry out immunizations and other child health activities. Interestingly enough, only one of these proposals was funded by PVC and two were rejected. One of the rejections was a proposal for AMREF interventions in South Nyanza Province. South Nyanza has the highest infant and maternal mortality rates in all of Kenya and is the number one priority area for the Kenyan MOH, the USAID/Kenya Mission, and AMREF.

From our perspective, it sometimes appears that the review process in Washington is inconsistent with Mission reviews and the proven ability of a PVO to conduct child health programs. In Washington, a part of the review is undertaken by a selected panel who use what appeat to be a set of academic criteria for evaluation. The panel usually includes members from outside USAID. This allows for a proposed PVO program to be evaluated by some individuals who do not know the PVO and have never seen any of its field projects. The message coming across from such a review process is that the emphasis appears to be on an ability to write a proposal rather than on an ability to perform. A number of large USAID health and family planning awards have been made to organizations expert at presentation. The implementation of many such awards have left a great deal to be desired.

Because of difficulties inherent in the implementation of Child Survival Grants, we would hope that USAID will give greater responsibility to country Mission involvement in the award process. The Misssions are in the best position to determine needs and assess ability to implement. With increased Mission input, there will be less weight given to "packaging" and more to performance .

AMREF is greatly appreciative of the efforts of the Select Committee on Hunger. We feel that your concerns regarding health, population, and nutrition in the developing world have done a great deal to focus the American public's attention, as well as USAID's, on these issues. I hope that this testimony will prove beneficial to our mutual interests in improving the qualitt of life for women and children.

PREPARED STATEMENT OF PATRICIA L. ROSENFIELD, PROGRAM OFFICER, CARNEGIE CORPORATION

Thank you very much for the honor of being asked to give testimony before the International Task Force of the House Select Committee on Hunger concerning how to improve implementation of the Congressional commitment, as stated in the legislation creating the Child Survival Fund, to meet the special health needs of children and mothers. In this testimony, I will be addressing a few outstanding elements that significantly affect the success of this commitment and will also suggest ways to strengthen the existing activities of this vital program.

The appropriations by Congress in Fiscal Year 1985 to establish the Child Survival Fund made it possible for the United States Agency for International Development (AID) to strengthen its activities in this field. AID has focused on three key factors affecting the incidence of infant and child death in developing countries: oral rehydration therapy; immunizations, including tetanus toxic to reduce both maternal and infant deaths; and nutrition, including promotion of breastfeeding and Vitamin A therapy. Attention is also being given to acute respiratory infections, promotion of child spacing through family planning, disease vector control, improvement of water supplies and sanitation, measurement of health impacts, resource allocation decisions, financing mechanisms, cost savings, and the development of effective local institutions (1). These are all important activities, but a major element is practically absent from this list -- child survival depends not only on healthy children but also on healthy mothers.

Fifteen years ago, in a major textbook on preventive medicine for the tropics, Lucas and Gilles emphasized that the concept of family health comprises not only infant and child care and family planning, but also maternal care (2). Yet, maternal care has been the stepchild rather than the full partner of the Child Survival program. As a result, the solutions proposed to improve child survival and promote family planning are missing an important part of the problem.

Mother and child are one unit from the moment of conception. Together, they progress toward birth, a medically significant event for both of them. Injury, ill-health or inadequate care affecting one element of this unit affects the well-being of the whole. A successful outcome of the pregnancy process -- a living, healthy infant and a living, healthy mother -- depends on the care received before birth, the care received at birth, and, then, on the care both receive after birth. Birth does not end the symbiosis. The mother plays a major role in creating the environment not only for the fetus, but also for the infant, and, subsequently, the child. It is an environment upon which both mother and child depend for their survival and well-being.

And, for the female child, only a medically and socially healthy upbringing can ensure that her own experience as a mother will be a healthy one, with its own successful outcome.

While the symbiotic relationship between mother and child may seem obvious, until recently this relationship has not received the attention it deserved from the international health community, nor from the national health services of many developing countries. Maternal health, including maternal health at childbirth, was not an important focus for intervention. This fact may have led policy makers to believe that the mother-child interface itself did not present a serious problem. Few data were collected on maternal health and mortality. The problem was thus not as evident as that of infant mortality -- a subject of humanitarian and then demographic concern on a global basis for at least the last thirty years. Infant mortality data from different countries showed shocking disparities, for example, infant death rates of 176/1000 live births in Mali, Sierra Leone and Guinea, as compared to 8/1000 in the Netherlands, Denmark, Norway and Switzerland (3). With increasing concern about declining economic development, infant mortality rates seemed to reflect the social and economic conditions of the developing world more acutely than other statistics. Economists and health planners chose to work with infant mortality as an indicator of the social and economic well-being of the community and of the effectiveness of the health service delivery system.

In fact, infant mortality is not an accurate indicator of these conditions: A high level of infant mortality is an indicator of inadequate health, social, and economic conditions of the life of the mother of the child who dies (4). For both the infant and the mother, the risk of death "is determined by the condition of the pregnant mother rather than the condition of the child itself" (5).

Yet, a focus on child survival and the reproductive health of women addresses only part of the problem; additional elements critical to maternal and child survival relate to the general health of the mother, her nutritional status, and her economic and social status. These aspects are also briefly referred to in this testimony.

A few studies are beginning to shed light on the symbiotic linkage between mother and child as measured by maternal mortality, perinatal mortality, and infant and child survival in the event of the mother's death. Slightly more than one year ago, in February 1987, international donor and technical assistance agencies sponsored the Safe Motherhood Conference in Nairobi, Kenya. This was the first time that systematic reviews of existing data on the problem of maternal health and mortality were presented; a plan of action was recommended for implementation by countries and the international and bilateral aid agencies. Statistics reported on at the meeting indicated that 500,000 maternal deaths (at a minimum) take place every year and 99% of those deaths occur in the developing world. It was estimated that in the developed world, there are only "two to nine maternal deaths per 100,000 live births [0.02 - 0.09 per 1000]; in the developing countries, the figures range from 300 to 1000 or more [3 to 10 per 1000] women in developing countries run a risk of dying in pregnancy and child birth that is 50 to 100 times greater than that of women in the developing world" (6).

As more studies are reported on, the data seem to favor the high, negative side of these statistics, emphasizing that the more we know, the worse the problem becomes. For example, in a study (published in 1985) based on three years of extensive data collection from 1976 to 1979 in Zaria, Northern Nigeria, 22,774 pregnancies were monitored and analyzed by Kelsy Harrison and his colleagues (7). During this period of study, there were 238 maternal deaths or about 10.5 deaths per 1000 deliveries; yet, this high figure masks the even higher figure of 28.6 deaths per 1000 births for those women who did not receive antenatal care and had to go the hospital for an emergency delivery because of complications.

In a study soon to be published from The Gambia, Greenwood and colleagues have found that over a one-year period, maternal mortality was 22 per 1000 births, ranging from 26 per 1000 for those giving birth for the first time to 45 per 1000 for those having their fifth or higher pregnancy; those in-between at 1 through 4 previous pregnancies fared better, at 12 deaths per 1000 births (8).

Studies carried out at other sites around the developing world show a range of from 13 per 100,000 [0.13 per 1000] live births in urban Shanghai to 874 per 100,000 [8.74 per 1000] in rural Anantapur, India (9).

In the report of the Safe Motherhood Conference, the estimated lifetime chance of dying from pregnancy related causes over the period 1975 to 1984 was estimated for various regions (6,p.12):

Northern Europe:	1 in 9850
North America:	1 in 6366
Caribbean:	1 in 140
South America:	1 in 73
Asia:	1 in 54
Africa:	1 in 21

In the developed world it is well-known that the excess mortality rates for adult males exceed those of adult women at every age. In developing countries, the excess mortality rates for women in their childbearing years are greater than those for men of the same age. As Ayeni showed in analyzing the 1963 sex ratios in Western Nigeria, there is a slight predominance of females between "15 and 35 years, while above 35 the males outnumber females. Causes of such a pattern are thought to be due...partly to relatively heavy maternal mortality" (10). Other studies show that "complications of pregnancy and child birth are often the leading causes of death among women of childbearing age in developing countries, accounting for 20% to

45% of the deaths of these women. In the United States, that figure is less than 1%" (6,p.13).

While the differences between infant mortality rates in the developed and developing world are large, the differences between maternal mortality rates are even more deplorable. The report of the Safe Motherhood Conference dramatically describes this situation (6,p.13): "These figures serve as a stark reminder of the poor health and neglect many women suffer in the developing world. They also show what can be achieved when, beginning in childhood, women are well-nourished and healthy, have access to prenatal and general health care, as well as obstetric measures, and can practice safe and effective family planning, as is generally the case in developed countries".

Data are rapidly accumulating which relate poor maternal health care to perinatal deaths, or death of the infant during the first week after birth. For example, in the report from Zaria, the perinatal mortality rate in all single births was 103 per 1000 births. The principal causes of the deaths were "obstructed labor and its consequences, anemia, antepartum hemorrhage, eclampsia, low fetal birth weight" (7,p.86). These factors relate to the clinical, cultural and social conditions of the mother which influence fetal survival as well as her own.

A study at Ibadan Hospital, in the south of Nigeria, demonstrated the differences in perinatal mortality between women who had adequate antenatal care and those who came to the hospital for emergency care only at time of birth. The perinatal mortality rate for the former was 39.3 per 1000 total births versus 247.1 per 1000 total births for the latter (11).

In The Gambia study, death rates at moment of birth (stillbirths and neonatal deaths) were also high -- 35 and 65 per 1000 respectively (8,p.12). In this case, prematurity and infection were the main causes of death. The factors influencing these deaths were related to the mothers: first or late pregnancies (under 20 or over 40 years old) and multiple pregnancies.

These data describe the immediate consequences of reproductive ill-health for women and infants. Equally distressing is what happens to the child who survives birth when the mother has died in childbirth. While there are not yet extensive statistics on this subject, the study in Zaria, for example, indicates that "the proportion of surviving children was 71% for the surviving women and only 58% for the dead women" (7,p.109). The Gambia study indicates even more shockingly that "all nine children born to the mothers who died failed to reach the age of one-year. Maternal death is thus almost inevitably a double tragedy" (8,p.19). This double tragedy is born out by a study in Bangladesh that indicated "when a woman died in childbirth, the infant she was carrying also died in 95% of the cases. The survival and health of young children usually depend on the good continued good health of their mothers" (6,pp.23-24).

A study from nineteenth-century Sweden, confirms the historical precedence of these findings: "Of those children age 1 to 5 when their mother died, only 13% survived (to) their fifth birthday" (12).

These data are grim but there are striking examples of countries that have met the challenge and reduced maternal mortality. In Sri Lanka, for example, the maternal death rate was 16.5/10,000 (or 1.6/1000) live deliveries in 1945 (13). By 1980, the rate had dropped to 0.6/10,000 (or 0.06/1000). Infant mortality in Sri Lanka fell from 140 per 1000 live births to approximately 34.4 per 1000 over the same 35 year period. Sri Lanka, one of the poorest countries in the world (per capita income of US $360 in 1984), achieved this improvement through political determination to support a combination of social, economic and medical improvements, focusing on both mothers and children.

In Kenya, in the Machakos area close to Nairobi, data from a study carried out over the period 1975 to 1978 indicate that the maternal mortality rate was 0.8 per 1000 deliveries with perinatal death rate of 46.4 per 1000 total births and a neonatal death rate of 23.1 per 1000 births (14). In this specific site, there had been special attention given to the care of both mothers and children because this small community was the long-term study area for many research groups.

The hope springing from these experiences combined with the positive examples of the developed world demonstrate that a knowledge of the risk factors and political commitment to reducing those risks can reduce maternal mortality, and, in turn, reduce infant mortality and increase child survival. Moreover, the data show that this can be achieved before widespread economic development success.

Like the factors influencing child survival, the causes of maternal mortality are not mysterious. They have been well documented (6,p.21). While causes may differ in relative importance from place to place, there are five main causative factors that lead directly to 75% of the maternal deaths; hemorrhage, obstructed labor, infection, toxemia (a condition of high blood pressure which can lead to convulsions and death), and unsafe abortion. Moreover, these causes are related to generally recognizable risk factors, although it must be noted that even with good antenatal care, a certain percentage (at least 5%) will develop unpredictable complications. Those related to the general status of women include nutritional conditions, illiteracy, the number of previous births of the mother, the age of the mother, and, sometimes, the ethnic or religious background of the mother. During pregnancy, access to prenatal care services depends on the demands on a mother's time, which may limit her ability to seek the appropriate level of care. The risks -- such as anemia, low weight gain, and increasingly high blood pressure -- then go unnoticed. At time of delivery, the lack of access to adequate service, skilled surgical staff, the training of the health worker, the type of pregnancy management (induced abortion or Caesarean section), blood pressure, parity (number of births), age and hygienic conditions are crucial factors that affect the outcome for the woman and the child.

The heavy daily workload for most women in developing countries combined with low levels of nutrition deplete her physical resources, leading to low birth weight babies and reduced survival of mother and child. Moreover, during the period of child-rearing, the woman's role as producer of economic and social well-being and family health may reduce the time and energy she has to care for the child, and attend to such matters as the preparation of ORT as many times as required to stop diarrhoea, or taking the child to the health center for its immunizations. This reduces the benefits of child survival programs, such as those supported by US AID (15).

As in the case of the child survival program, these risks can be reduced with appropriate definitions of the problem and clearly targeted solutions. The participants at the Safe Motherhood Conference have recommended a three-pronged approach to combat the immediate causes of maternal death: stronger community-based health care; improved referral facilities for the cases requiring skilled surgical care; and, an improved monitoring system for high risk pregnancies along with an improved transport system for the emergency cases.

A recent meeting of experts at the World Health Organization reviewed studies of medical records of women who had died during pregnancy. The records came from nine developing countries and indicated that "60% to 80% of direct maternal deaths and 88% to 98% of all maternal deaths could probably have been avoided with proper handling" (9,p.177). Proper handling does not mean costly additions to the health service, rather it means that health service staff know how to recognize risks and treat complications (e.g., availability of antibiotics) and that essential equipment for monitoring risks and performing blood transfusions and surgical interventions -- as well as for providing hot water to ensure hygienic conditions at birth -- must also be available.

Maternal services including prenatal care must be accessible and acceptable. Auxiliary health workers, including traditional birth attendants, could be trained to identify the high risk women and inform those women in a culturally sensitive way about their condition so that they can be monitored at the community level. It is not difficult to identify high-risk women: "high risk women are too young, too old, have had too many babies, or have had their babies too close together" (16). At the same time, not all those women at high risk need to be immediately referred to a higher level of care. Indicators or guidelines for such referral need to be developed locally and be based on local competence and skills of the people working at the community level and those staff working at the first level referral service.

Yet, as mentioned above, changing those risk behaviors requires more than improving the health services (see ref. 15). A woman's choice about seeking services and minimizing those risks relates directly to her attitudes toward pregnancy and childbirth, her perception of the benefits from those services, and the opportunity costs of the time and the financial resources available to the women to seek both prenatal care and present herself for delivery at a well-equipped and well-staffed health center. The attitudes and resources of the father and/or other members of the family also influence both maternal and child survival.

Oduntan, in a pioneering study of the factors influencing the health of Nigerian school children in Ibadan, demonstrated that educational attainment, occupation and income of both mothers and fathers "were important determinants of the cultural practices in the homes, their dietary habits, the availability of basic sanitary facilities and the general state of health of the children" (17). Some of the data indicated the mother's educational attainment had greater impact than that of the father, especially concerning dietary habits and health of the children. Several studies are tending to underline education as the crucial factor influencing the attitudes of women toward their own health and that of their children. The Zaria study indicated the pivotal role that formal education played, especially when combined with utilization of prenatal care (7,p.15). The study showed the following maternal and perinatal death rates and infant birth weights by education and prenatal care, and planned hospital delivery, as given in Table 1 below.

TABLE 1. The influence of education and access to prenatal care on maternal mortality, perinatal mortality and infant birth weight (7,p.15).

	Maternal Mortality Rate (per 1000 deliveries)	Perinatal Mortality Weight (per 1000 hospital & home births)	Infant Birth Weight (2.50kg (%))
Educated Woman/ Prenatal Care/ Hospital Delivery (PNCHD)	2.5	30.00	7.7
Uneducated & PNCHD	1.0	0.44	10.8
Educated & Emergency Care	0.0	169.0	20.07
Uneducated & Emergency Care	28.9	258.0	29.9

The birth weight of the baby indicates the importance of education and care of the mother which influences long-term survival of the baby. As Harrison concluded, "The educated women [who had participated in PNC and planned hospital delivery] had significantly fewer problems and the uneducated emergency admissions fared worst on practically every account..." (7,p.15). Moreover, the uneducated women came primarily from the Moslem Hausa part of the population, where customs, not the woman's health status, dictate the kind of care a woman is allowed to seek. This was in a situation where medical facilities were freely and equally available to all; the larger proportion of the women in each instance, except for the uneducated emergency cases, lived relatively close to the hospital. A further indication of the impact of education is that women under 15 with primary or secondary education had no births, thus eliminating one major risk factor -- "too young". For the other age groups, in every case except for the 17 to 19 year-olds, those with primary, secondary or post-secondary education had a greater percentage of their children still alive than those women with no education.

A recent paper by Caldwell and Caldwell reviews data from their studies and those of others in Asia, Latin America and Africa on the differences in child survival between mothers with formal education and those with little or none. The data "show that for most countries, maternal education had a stronger influence than parental education [in some cases the father's education was equally important] and that both were more significant than income level" (18).

To summarize, the following are the main requirements for maternal survival: Health care workers who are able to recognize and monitor risk factors from conception to birth -- age, bone structure, anemia, weight, blood pressure, infection, bleeding, determine whether labor is prolonged (i.e., more than twelve hours)--and have access to a good referral service. Training for those attendants (traditional or otherwise) working at the community level could include basic nutritional information and use of monitoring devices for measuring weight, arm circumference, and hemoglobin levels. For birth, they could be provided with and trained to use a basic kit which includes soap, nail brush, string, razor blade, and 1% silver nitrate drops (19). At health care centers, facilities could be up-graded to provide blood transfusions, perform Caesarean sections, provide antibiotics, measure blood pressure to monitor toxemia, and provide sedatives to prevent eclampsia.

Women of small stature, women at first birth, and women having more than six children are all at risk of complications, such as obstructed labor, delayed labor, and high blood pressure. These women need to be monitored closely and have access to emergency services at time of birth. For anemia -- one of the indirect causes of maternal mortality -- malarial prophylaxis, iron treatment, or folic acid could be given at the community level. For tetanus, as mentioned earlier, the tetanus toxoid vaccine is already part of the child survival package that also protects mothers. Close linkages with the already-existing family planning programs could help prevent high risk pregnancies which could lead to reduced illicit, unsafe abortions (a major cause of maternal death) and increased child spacing, both of which will increase the survival of mothers and children.

Prenatal and delivery interventions are not highly costly. The minimum package includes training, birth kits for different facilities, the ability to measure hemoglobin levels, blood pressure, and weight; more costly surgical facilities are needed at referral health centers or hospitals. The most costly part is ensuring that a woman has access to emergency services at time of delivery, and, for high risk cases, is able to go to the referral health center or the hospital before delivery. This means improved transport to the referral health center or hospital as well as the presence of support groups at the community level which could be organized to provide the transport or contribute to child care or food production while the woman is awaiting childbirth at the hospital.

The positive experiences referred to earlier demonstrate that this can be done. And, if these services are provided jointly with the services implementing child survival actions, there should be savings in human and financial resources.

In addition, as noted above, education also results in a joint product -- improved health of women and children. By building on the commitment most developing countries already have to provide formal education for their citizens, and ensuring that the percentage of girls having access to that education becomes universal ((female levels of enrollment in 1983 in sub-Saharan Africa were 38% for primary and 34% for secondary schools (20)), maternal and child survival will benefit.

Dr. Halfdan Mahler, the Director-General of the World Health Organization, emphasized to the Safe Motherhood Conference participants that:

> We are speaking of resources which already exist in most developing countries, but not in adequate quantity...training more midwives, traditional or otherwise, extending or strengthening at district and subdistrict level the primary health care system for the provision of good prenatal and family planning services...upgrading district hospitals and rural maternity centers so that they can perform the most essential life saving functions in midwifery and obstetric care.... These kinds of modest resources can be made available and deployed effectively through a combined effort of central and district governments, of international and bilateral agencies, of nongovernment organizations and of the communities and families themselves (21).

Between 1965 and 1984, as a result of focused attention of the international health agencies, the bilateral technical assistance agencies and national governments of the developing world, infant mortality rates in low-income economies (per capita income of $400 or less in 1984) have been reduced from 125 to 72 per 1000 births; child death rates for ages 1 to 4 have been reduced from 19 to 9 per 1000 children for each age group; male life expectancy at birth has been increased from 49 to 60 years and female life expectancy from 51 to 61 (3,p.232).

Over this 20-year period, we do not know the statistics for maternal mortality. The data have not been sytematically collected nor do we have the data on those women who have died whose babies have died and who are not included in infant mortality rates or the child mortality rates. We know life expectancy for women in the childbearing ages in developing countries is considerably reduced compared to men in those same ages. Fortunately, we know what to do and we know it will not unduly burden communities and health services. The challenge for decision makers and donors is to identify the specific mix of activities that needs to be supported and implemented at the local level to reduce maternal mortality along with reducing infant and child mortality. The outcomes will ensure not only sustained child survival, but will also greatly increase the likelihood that those women who are born today will be healthy enough to bear healthy children and be the productive mothers of the twenty-first century.

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ADDITIONAL QUESTIONS FOR PATRICIA ROSENFIELD

SUBMITTED BY HON. MICKEY LELAND

1. This Committee has held hearings and issued a report on the critical importance of female education in ensuring that mothers and their children are heathy. I am increasingly impressed that female education is one of the keys to child survival. What, in your opinion, should we do to encourage the development of strong systems of education which encourage girls to stay in school?

ANSWER.

You are entirely correct that female education is one of the keys to child survival. It is also a crucial element for maternal survival. There are two issues in your question. First is the development of strong systems of education in developing countries that increase the sense of control that women have over their own destiny; and, the second relates to measures that encourage girls to stay in school.

Concerning the first, the World Bank has given special attention to the improvement of the educational systems in sub-Saharan Africa, in particular. A meeting in Paris in January on this topic has resulted in a collaborative arrangement between the donor community, including USAID, and ministries of education in Africa to work together to assess the needs in education on a country-specific level and to develop coordinated programs of support drawing on both international and national resources. It is likely with this kind of collaborative approach, both in Africa and in other regions of the world, that strong systems of education will be given top priority as essential components of the development process.

More difficult to tackle, especially in rural agricultural settings, is the range of incentives that can encourage girls to stay in school. Studies are showing that there is increasing recognition by parents of the value of educated girls. Parents in Bangladesh, for example, are finding that they can arrange better marriages if their female children are more educated. Thus, the economic incentive to parents, that is the anticipation of future earnings of female children either through employment or marriage, may be one factor that will counteract parents having girls help out in the household or in subsistence agricultural rather than stay in school.

However, sometimes there is no choice for the mother when the male head of household has migrated to earn more money. She needs all the hands she can get to help around the house, and to help with subsistence agriculture and with other responsibilities including child care for younger siblings. In this situation, what is needed is a stronger support system at the community level that will enable women's groups in particular to provide the household and agricultural support for each other so that their children may be educated. If this kind of support system is combined with increased efforts to demonstrate to the women that increased education will benefit both the family and the female child, it is possible that there will be greater encouragement for the girls to stay in school. This is an important concern and one that should be specifically addressed to encourage the sustainability of the child and maternal survival programs.

Thus, in reply to your question about what the Select Committee on Hunger could do, I would suggest that continuing encouragement be given to USAID, UNICEF, and WHO to expand the child survival program to include specific activities focused on the education of female children and on the development of support groups at the community level for mothers so that they do not need to rely on their female child labor to assist with household or agricultural activities. These two efforts would be a major step forward.

USAID is now working closely with the World Bank and the other donor agencies as well as with countries to strengthen educational systems and link them to employment and development opportunities. Encouragement from the Committee to USAID to participate actively in this type of international collaboration would ensure that the most effective and affordable education systems are implemented within developing countries. It is likely that this kind of international collaboration could also enable AID to focus on its strengths in certain areas, such as the provision of training and educational material, and thereby reduce the overall cost to the U.S. government of supporting the development of strong systems of education in developing countries.

2. What should the role of nutrition be in child survival activities?

ANSWER.

Concerning the second question on the role of nutrition in child survival activities, attention has already been given during the hearings to the role of breastfeeding and the importance of vitamin supplements. However, it must be noted that breastfeeding does impose certain constraints on the economic and household activities of some mothers, particularly in urban settings. This must be addressed through community-based programs that could provide support for mothers who are breastfeeding so that they may sustain the breastfeeding process at least for the first three months of the child's life, which is considered the minimum amount of time for the child's health. However, as indicated in the earlier discussions, the first few months of life are important but the child must survive beyond that. The importance of appropriate weaning foods and vitamin supplements can not be overlooked, particularly given the unbalanced nutritional values of food supplies in many poor situations, namely, conditions of drought and desertification.

To ensure the long term health of the child it is imperative that special attention be given to the health of pregnant women. Attention must be given to women who are anemic and do not have access to a good diet during pregnancy because, with these conditions, the child that is born will likely have a low birth weight which is a very high risk factor for survival and the child may be less able to resist early infections. An integrated, systematic approach is needed to provide for improved nutrition of the child and the mother at all stages of the life cycle. Emphasis must be given to the nutritional status of pregnant women, the infant and the child; careful monitoring, provision of food supplements, and support for growing nutritious subsistence crops will be important complements to the present emphasis on breastfeeding and vitamins.

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